**Wk2: Scientists blast, exploding, light travel-time, Hubble in trouble, not exist, incorporate to the Bible, James Webb, Did God use**

**Secular scientists blast the big bang**

**What now for naïve apologetics?**

by [Carl Wieland](https://creation.com/dr-carl-wieland-cv)

It’s amazing to see how many Christian leaders have not merely tolerated the ‘big bang’ idea, but embraced it wholeheartedly. To hear their pronouncements, believers should welcome it as a major plank in our defense of the faith. ‘At last, we can use science to prove there’s a creator of the universe.’

However, the price of succumbing to the lure of secular acceptability, at least in physics and astronomy, has been heavy. We have long warned that adopting the big bang into Christian thought is like bringing the wooden horse within the walls of Troy. This is because:

The big bang forces acceptance of a sequence of events totally incompatible with the Bible.

* The big bang forces acceptance of a sequence of events totally incompatible with the Bible (e.g. earth after sun instead of earth before sun—see [Two worldviews in conflict](https://creation.com/two-worldviews-in-conflict) and [How could the days of Genesis 1 be literal if the Sun wasn’t created until the fourth day?](https://creation.com/how-could-the-days-of-genesis-1-be-literal-if-the-sun-wasnt-created-until-the-fourth-day))
* The big bang’s billions of years of astronomical evolution are not only based on naturalistic assumptions, they are contrary to the words of Jesus Himself, who said people were there from the beginning, not towards the end of an interminably long ‘creation’ process ([Mark 10:6](https://biblia.com/bible/esv/Mark%2010.6))—see [Jesus and the age of the world](https://creation.com/article/373#jesus_age).
* The slow evolution of the stars, then solar system and planets (including earth) in big bang thinking means that ‘big bang Christians’ are invariably dragged into accepting ‘geological evolution’ (millions of years for the earth’s fossil-bearing rocks to be laid down). So they end up denying the global Flood, and accepting death, bloodshed and disease (as seen in the fossils) before Adam. This removes the Fall and the Curse on creation from any effect on the real world, as well as removing *the* biblical answer Christians have always had to the problem of suffering and evil (God made a perfect world, ruined by sin). See [Terrorists and Death](https://creation.com/terrorists-and-death) and [The god of an old earth](https://creation.com/the-god-of-an-old-earth).
* Marrying one’s theology to today’s science means that one is likely to be widowed tomorrow.

第2周

世俗科学家猛烈抨击宇宙大爆炸

现在天真的护教学怎么办？ 卡尔·维兰德 令人惊奇的是，有多少基督教领袖不仅容忍了“大爆炸”的想法，而且全心全意地接受了它。 信徒们应该欢迎听到他们的声明，将其视为我们捍卫信仰的重要支柱。 “最后，我们可以用科学来证明宇宙有一位创造者。” 然而，屈服于世俗可接受性的诱惑的代价是沉重的，至少在物理学和天文学领域是如此。 我们早就警告说，将大爆炸纳入基督教思想就像将木马带入特洛伊城墙内一样。 这是因为： 大爆炸迫使人们接受一系列与圣经完全不相容的事件。 • 大爆炸迫使我们接受一系列与《圣经》完全不相容的事件（例如，地球在太阳之后，而不是地球在太阳之前——请参阅冲突中的两种世界观以及如果太阳直到 第四天？） • 大爆炸数十亿年的天文演化不仅基于自然主义假设，而且与耶稣本人的话相反，耶稣说，人类从一开始就在那里，而不是在无休止的漫长“创造”过程的结束时存在（ 马可福音 10:6）——参见耶稣和世界时代。 • 在大爆炸思想中，恒星、然后是太阳系和行星（包括地球）的缓慢演化意味着“大爆炸基督徒”总是被迫接受“地质演化”（地球上的含化石岩石需要数百万年的时间）。 放下）。 因此，他们最终否认了全球性的洪水，并接受了亚当之前的死亡、流血和疾病（如化石中所见）。 这消除了创造物的堕落和诅咒对现实世界的任何影响，也消除了基督徒对苦难和邪恶问题一直以来的圣经答案（上帝创造了一个完美的世界，被罪毁坏了）。 参见《恐怖分子与死亡》和《旧地之神》。 • 将一个人的神学与今天的科学结合起来意味着一个人明天可能会成为寡妇。

In fact, the signs are strong that exactly that is happening, and that those who have ‘bought’ the big bang for its allegedly irrefutable science have been ‘sold a pup’. A bombshell ‘Open Letter to the Scientific Community’ by 33 leading scientists has been published on the internet (Cosmology statement) and in *New Scientist* (Lerner, E., Bucking the big bang, *New Scientist* **182**(2448)20, 22 May 2004). An article on www.rense.com titled ‘Big bang theory busted by 33 top scientists’ (27 May 2004) says, ‘Our ideas about the history of the universe are dominated by big bang theory. But its dominance rests more on funding decisions than on the scientific method, according to Eric Lerner, mathematician Michael Ibison of Earthtech.org, and dozens of other scientists from around the world.’

The open letter includes statements such as:

The big bang today relies on a growing number of hypothetical entities, things that we have never observed—inflation, dark matter and dark energy are the most prominent examples.

* ‘The big bang today relies on a growing number of hypothetical entities, things that we have never observed—inflation, dark matter and dark energy are the most prominent examples. Without them, there would be a fatal contradiction between the observations made by astronomers and the predictions of the big bang theory.’
* ‘But the big bang theory can’t survive without these fudge factors. Without the hypothetical inflation field, the big bang does not predict the smooth, isotropic cosmic background radiation that is observed, because there would be no way for parts of the universe that are now more than a few degrees away in the sky to come to the same temperature and thus emit the same amount of microwave radiation. … Inflation requires a density 20 times larger than that implied by big bang nucleosynthesis, the theory’s explanation of the origin of the light elements.’ [This refers to the *horizon problem*, and supports what we say in [Light-travel time: a problem for the big bang](https://creation.com/2002).]
* ‘In no other field of physics would this continual recourse to new hypothetical objects be accepted as a way of bridging the gap between theory and observation. It would, at the least, *raise serious questions about the validity of the underlying theory* [emphasis in original].’
* ‘What is more, the big bang theory can boast of no quantitative predictions that have subsequently been validated by observation. The successes claimed by the theory’s supporters consist of its ability to retrospectively fit observations with a steadily increasing array of adjustable parameters, just as the old Earth-centred cosmology of Ptolemy needed layer upon layer of epicycles.’

事实上，有强烈的迹象表明这种情况正在发生，那些因为所谓的无可辩驳的科学而“购买”大爆炸的人已经被“卖掉了”。 33 位领先科学家发表的重磅炸弹“致科学界的公开信”已在互联网（宇宙学声明）和《新科学家》杂志上发表（Lerner, E., Bucking the big bang, New Scientist 182(2448)20, 22 May 2004 ）。 www.rense.com 上一篇题为“大爆炸理论被 33 位顶级科学家推翻”（2004 年 5 月 27 日）的文章说，“我们关于宇宙历史的观点被大爆炸理论所主导。 但根据埃里克·勒纳 (Eric Lerner)、Earthtech.org 的数学家迈克尔·伊比森 (Michael Ibison) 以及来自世界各地的数十位其他科学家的说法，它的主导地位更多地取决于资金决策，而不是科学方法。 公开信包括以下声明： 今天的大爆炸依赖于越来越多的假设实体，这些都是我们从未观察到的东西——暴胀、暗物质和暗能量是最突出的例子。 • “今天的大爆炸依赖于越来越多的假设实体，这些是我们从未观察到的事物——暴胀、暗物质和暗能量是最突出的例子。 没有它们，天文学家的观测结果与大爆炸理论的预测之间就会出现致命的矛盾。 • “但是如果没有这些捏造的因素，大爆炸理论就无法生存。” 如果没有假设的暴胀场，大爆炸就无法预测所观察到的平滑、各向同性的宇宙背景辐射，因为现在距离天空几度以上的宇宙部分将无法到达地面。 相同的温度，从而发射相同量的微波辐射。 …暴胀需要的密度比大爆炸核合成所暗示的密度大20倍，大爆炸核合成是轻元素起源的理论解释。”[这指的是地平线问题，并支持我们在光旅行时间中所说的：一个问题 大爆炸。] • “在物理学的其他领域中，这种对新假设物体的不断求助不会被接受为弥合理论与观察之间差距的一种方式。 它至少会引发关于基础理论有效性的严重问题[强调原文]。 • “此外，大爆炸理论无法夸耀任何随后通过观察得到验证的定量预测。 该理论的支持者声称的成功在于它能够用一系列稳定增加的可调参数来回顾性地拟合观测结果，就像托勒密古老的地心宇宙论需要一层又一层的本轮一样。

The dissidents say that there are other explanations of cosmology that do make some successful predictions. These other models don’t have all the answers to objections, but, they say, ‘That is scarcely surprising, as their development has been severely hampered by a complete lack of funding. Indeed, such questions and alternatives cannot even now be freely discussed and examined.’

Those who urge Christians to accept the big bang as a ‘science fact’ point to its near-universal acceptance by the scientific community. However, the 33 dissidents describe a situation familiar to many creationist scientists: ‘An open exchange of ideas is lacking in most mainstream conferences … doubt and dissent are not tolerated, and young scientists learn to remain silent if they have something negative to say about the standard big bang model. Those who doubt the big bang fear that saying so will cost them their funding.’

Evolutionist and historian of science, Evelleen Richards, has noticed that it’s hard even for rival *evolutionary* theories to get a hearing when challenging the ruling paradigm.

Evolutionist and historian of science, Evelleen Richards, has noticed that it’s hard even for rival *evolutionary* theories to get a hearing when challenging the ruling paradigm—see [Science … a reality check.](https://creation.com/science-a-reality-check) This should give some idea of the difficulties biblical creationists face.

But don’t we read, even in the daily newspapers, about many ‘observations’ that only ever seem to support the big bang? In fact, these prominent secular scientists say:

‘Even observations are now interpreted through this biased filter, judged right or wrong depending on whether or not they support the big bang. So discordant data on red shifts, lithium and helium abundances, and galaxy distribution, among other topics, are ignored or ridiculed.’

持不同政见者表示，宇宙学的其他解释确实做出了一些成功的预测。 这些其他模型并没有回答所有的反对意见，但是，他们说，“这并不奇怪，因为它们的发展因完全缺乏资金而受到严重阻碍。” 事实上，这些问题和替代方案甚至现在都无法自由讨论和审查。 那些敦促基督徒接受大爆炸作为“科学事实”的人指出，科学界几乎普遍接受了大爆炸。 然而，这 33 名持不同政见者描述了许多神创论科学家所熟悉的情况：“大多数主流会议都缺乏公开的思想交流……怀疑和异议是不被容忍的，如果年轻科学家对创世论有负面看法，他们就会学会保持沉默。” 标准大爆炸模型。 那些怀疑大爆炸的人担心这样说会让他们失去资金。 进化论者和科学史家伊芙琳·理查兹注意到，在挑战统治范式时，即使是竞争对手的进化论也很难得到倾听。 进化论者和科学史学家伊芙琳·理查兹（Evellen Richards）注意到，在挑战统治范式时，即使是竞争对手的进化论也很难得到倾听——参见《科学》……现实检验。 这应该让我们对圣经神创论者所面临的困难有所了解。 但我们难道没有读到，甚至是在日报上，许多“观察”似乎只支持大爆炸吗？ 事实上，这些著名的世俗科学家说： “现在，即使是观察结果也会通过这种有偏见的过滤器来解释，判断正确或错误取决于它们是否支持大爆炸。” 因此，关于红移、锂和氦丰度以及星系分布等主题的不一致数据都被忽视或嘲笑。

Science is a wonderful human tool, but it needs to be understood, not worshipped. It is fallible, changing, and is severely limited as to what it can and cannot determine. As CMI has often pointed out, instead of a scientific concept, the big-bang idea is more a dogmatic religious one—based on the religion of humanism1. As these big-bang opposers point out:

‘Giving support only to projects within the big bang framework undermines a fundamental element of the scientific method—the constant testing of theory against observation. Such a restriction makes unbiased discussion and research impossible.’

Furthermore, contrary to the naïve pronouncements of many who should know better, it is not in any sense a matter of ‘looking into a telescope and “seeing”? the big bang billions of years ago.’ As always, observations are interpreted and filtered through worldview lenses. Those who developed the big bang were guided by secular worldview filters just as much as those who are now crying that the emperor has no clothes. They wanted a universe that created itself; their opponents want an eternal, uncreated universe. From a Christian perspective, both are in open defiance of their Creator’s account of what really happened.

With Darwinism on the run, the Enemy of souls is seeking to seduce believers into embracing a more subtle, yet far deadlier way of evading the authority of the Bible. With progressive creationism/big-bangery rampaging through the evangelical community, he must think he is on a winner.

For a powerful, profound exposition of all of the issues involved in this, today’s most important evangelical compromise position, my colleague [Dr Jonathan Sarfati’s](https://creation.com/dr-jonathan-d-sarfati) just-released book [*Refuting Compromise*](https://creation.com/store_redirect.php?sku=10-2-575) is not just a casual recommendation ‘for further reading’. Chapter 5 pokes holes into the big bang, showing how it has become a ruling paradigm, supported by fallacious logic and ignoring many scientific problems—some confirmed by the above letter from big-bang–dissenting evolutionary cosmologists. It also shows how one can use a [‘first cause’ argument](https://creation.com/if-god-created-the-universe-then-who-created-god) without needing the big bang. The book is in fact destined to become a Christian classic, a culture-changing colossus of ‘cut-through-the-smokescreen’ clarity and logic. I urge all who are reading this to get [*Refuting Compromise*](https://creation.com/store_redirect.php?sku=10-2-575), read it, lend it and give it out far and wide.

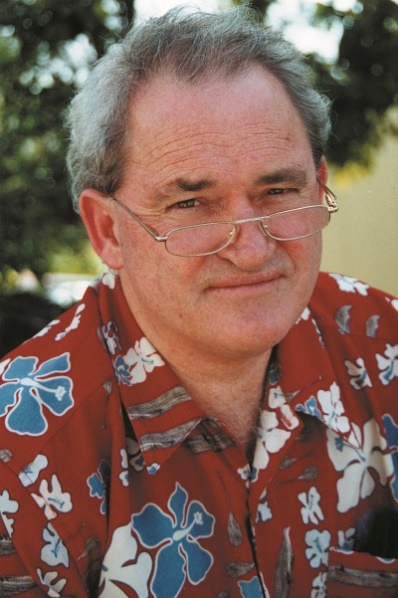
科学是一种奇妙的人类工具，但它需要被理解，而不是崇拜。 它是容易犯错的、不断变化的，并且它能够和不能确定的东西受到严格限制。 正如 CMI 经常指出的那样，大爆炸思想不是一个科学概念，而是一个基于人文主义宗教的教条宗教概念。 正如这些大爆炸反对者指出的那样： “只支持大爆炸框架内的项目会破坏科学方法的一个基本要素——根据观察不断检验理论。” 这样的限制使得公正的讨论和研究变得不可能。 此外，与许多应该更了解的人的天真声明相反，这在任何意义上都不是“看着望远镜并“看到””的问题？ 数十亿年前的大爆炸。”一如既往，观察结果是通过世界观镜头来解释和过滤的。 那些发展大爆炸的人受到世俗世界观过滤器的引导，就像那些现在哭着皇帝没穿衣服的人一样。 他们想要一个能够自我创造的宇宙； 他们的对手想要一个永恒的、非受造的宇宙。 从基督徒的角度来看，两者都公然蔑视造物主对真实发生的事情的描述。 随着达尔文主义的猖獗，灵魂之敌正试图引诱信徒采用一种更微妙但更致命的方式来逃避圣经的权威。 随着进步神创论/大爆炸在福音派社区中肆虐，他一定认为自己是胜利者。 为了对当今最重要的福音派妥协立场所涉及的所有问题进行有力、深刻的阐述，我的同事乔纳森·萨法蒂博士刚刚出版的《驳斥妥协》一书不仅仅是“进一步阅读”的随意推荐。 第五章对大爆炸提出了漏洞，展示了它如何成为一种主导范式，受到错误逻辑的支持，并忽视了许多科学问题——其中一些问题已被上述持反对意见的进化宇宙学家的信所证实。 它还展示了如何在不需要大爆炸的情况下使用“第一原因”论证。 事实上，这本书注定会成为基督教经典，成为改变文化的巨著，其“穿透烟幕”的清晰度和逻辑性。 我敦促所有正在阅读本文的人都获得《反驳妥协》，阅读它，借出它并广泛传播。

**Exploding the big bang!**

**An interview with creationist physicist/cosmologist John Hartnett**

by [Gary Bates](https://creation.com/gary-bates)

[Dr John G. Hartnett](https://creation.com/dr-john-hartnett-bio) received his Ph.D. in Physics, with distinction, from the University of Western Australia, where he is currently a Post-Doctoral Fellow. His current research interests include ultra-low–noise radar; ultra-high–stability microwave clocks based on pure sapphire resonators; tests of fundamental theories of physics, such as Special and General Relativity; and measurement of drift in fundamental constants and their cosmological implications. He has published more than 30 papers in refereed scientific journals.

Dr John G. Hartnett.

How did our universe come to be? This is one of the ‘big’ questions, and scientists who study the origin and history of the universe (cosmos) are called *cosmologists*. Nearly all modern cosmologists believe that everything was ‘kickstarted’ by a ‘big bang’1 about 15 billion years ago, where the universe suddenly emerged from an extremely hot and dense state.2

爆发出大爆炸！ 采访神创论物理学家/宇宙学家约翰·哈特内特 通过加里·贝茨 John G. Hartnett 博士获得博士学位。 他以优异的成绩获得西澳大利亚大学物理学博士学位，目前是该大学的博士后研究员。 目前的研究兴趣包括超低噪声雷达； 基于纯蓝宝石谐振器的超高稳定性微波时钟； 物理学基础理论的测试，例如狭义相对论和广义相对论； 以及基本常数漂移的测量及其宇宙学意义。 他已在权威科学期刊上发表了 30 多篇论文。 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 约翰·哈内特博士。 我们的宇宙是如何形成的？ 这是“大”问题之一，研究宇宙（宇宙）起源和历史的科学家被称为宇宙学家。 几乎所有现代宇宙学家都相信，一切都是由大约 150 亿年前的一次“大爆炸”1“启动”的，当时宇宙突然从极其炎热和致密的状态中出现。2

But one dissenter from this ideology is Dr John Hartnett—this makes him a ‘rare breed’ of physicist. He is one of a relatively small number of Bible-believing creationists worldwide involved in cosmological research and thinking.

**Facts vs their interpretation**

When they view distant stars that are millions of light-years away from the earth, many folk, including Christians, have trouble accepting the biblical account that God created the universe about 6,000 years ago. But believing the Bible right from the start is not a problem for John, which puts him at odds with his evolutionary counterparts.

Often they will accuse him of denying reality (‘look, we can see it—it’s obvious’). But John explains that when looking at the universe, it’s no different to looking at the fossil record.

It’s the *interpretation* of the evidence’, he says. ‘Sure, distant stars and galaxies might be millions of light-years away, but that doesn’t mean that it took the light millions of years, by our standards, to get here. A light-year is a measurement of *distance*, not time. [It is the distance that light would travel in a year through a vacuum at its current speed of 300,000 km/sec (186,000 miles per second), i.e. 9,461,000,000,000 km (5,878,000,000,000 miles).] In other words, it’s just an expression used to tell us how far away something is—not how long it took the light to get here.’

What I really find amusing is the way people from various other fields of science often quote the big bang as if it’s set in stone.

John did not always believe in Genesis creation. He explains that he was interested in cosmology from a very young age, and mixed with those of similar interests. When John was 16, he and a friend co-authored a cosmology book that won a local science contest.

但约翰·哈特内特博士是这一意识形态的反对者——这使他成为“稀有”的物理学家。 他是世界范围内为数不多的相信圣经、参与宇宙学研究和思考的神创论者之一。 事实与他们的解释 当看到距离地球数百万光年远的遥远恒星时，包括基督徒在内的许多人都很难接受圣经中上帝在大约 6000 年前创造宇宙的说法。 但从一开始就相信圣经对约翰来说并不是问题，这使他与进化论同行产生了分歧。 他们常常指责他否认现实（“看，我们可以看到它——这是显而易见的”）。 但约翰解释说，观察宇宙与观察化石记录没有什么不同。 这是对证据的解释，”他说。 “当然，遥远的恒星和星系可能有数百万光年远，但这并不意味着按照我们的标准，光需要数百万年才能到达这里。 光年是距离的测量单位，而不是时间的测量单位。 [这是光以目前 300,000 公里/秒（每秒 186,000 英里）的速度在真空中传播一年的距离，即 9,461,000,000,000 公里（5,878,000,000,000 英里）。] 告诉我们某物有多远，而不是光到达这里需要多长时间。 我真正觉得有趣的是来自其他科学领域的人们经常引用大爆炸，就好像它是板上钉钉的一样。 约翰并不总是相信创世记的创造。 他解释说，他从很小的时候就对宇宙学感兴趣，并与那些有相似兴趣的人混合在一起。 约翰 16 岁时，他和一位朋友合着了一本宇宙学书籍，并赢得了当地的科学竞赛。

**Big bang founded on unprovable assumptions**

He says, ‘At that time, I would have described myself as an atheist, believing that the big bang had all the answers, although there was actually very little in the way of specifics about this model. It was this that drove me into further investigation.

Interestingly, most people think that the big bang has already been worked out, but they don’t realize that there are differing versions of the big bang model—and not everyone agrees. By inserting a few unprovable *assumptions* at your starting point, you can end up with virtually any model you like. The big bang *assumes* that the universe has no centre or edge. Not only is this not proven, some recent research on redshift patterns have badly damaged its credibility by indicating that our galaxy is at, or near to, the centre of the universe.3

‘What I really find amusing’, he says, ‘is the way people from various other fields of science often quote the big bang as if it’s set in stone. I don’t wish to sound unkind, but because they are not experts in this field, many of them have no idea what the big bang is really all about and misunderstand it.’

At present, John is assisting another creation scientist, [Alex Williams](https://creation.com/alexander-williams), in compiling a book about the big bang from a creationist viewpoint. ‘We really want to show the scientific weaknesses in big bang thinking, and that you can’t fit it into the Bible’, he says. Jokingly, he adds, ‘We actually want to create a big bang of our own among the scientific establishment, and dispel the myth of this cherished icon of evolution.’

大爆炸建立在无法证明的假设之上 他说：“当时，我会把自己描述为一个无神论者，相信大爆炸拥有所有的答案，尽管关于这个模型的具体细节实际上很少。 正是这一点促使我进一步调查。 有趣的是，大多数人认为大爆炸已经被解决了，但他们没有意识到大爆炸模型有不同的版本——而且并不是每个人都同意。 通过在起点插入一些无法证明的假设，您最终可以得到几乎任何您喜欢的模型。 大爆炸假设宇宙没有中心或边缘。 这不仅没有得到证实，而且最近一些关于红移模式的研究表明我们的星系位于或接近宇宙中心，严重损害了其可信度。 3 “我真正觉得有趣的是，”他说，“来自其他科学领域的人们经常引用大爆炸，就好像它是板上钉钉的一样。 我不想听起来不友善，但因为他们不是这个领域的专家，所以他们中的许多人不知道大爆炸到底是什么，并且误解了它。 目前，约翰正在协助另一位创世科学家亚历克斯·威廉姆斯（Alex Williams）编写一本从创世论角度讲述大爆炸的书。 “我们真的想展示大爆炸思维的科学弱点，并且你无法将其融入圣经，”他说。 他开玩笑地补充道，“我们实际上想在科学界掀起一场我们自己的大爆炸，并消除这个珍贵的进化标志的神话。”

**Solving problems**

John is not content simply to point out that a light-year is just a measure of distance, but tries to explain distant starlight from a biblical framework:

‘The way I see it, the Bible is true and the stars were created on Day 4. Yes, the universe is very large but we also have a very great God. My personal view is that the explanation probably involves a certain amount of miraculous activity during Creation Week.

There is every reason to anticipate a logical scientific explanation for all that we see.

‘But I don’t believe that we see any false information, like “light created on its way.” This would mean that we would be seeing light from heavenly bodies that don’t really exist; and even light that seems to indicate precise sequences of events predictable by the laws of physics, but which never actually happened. This, in effect, portrays God as a deceiver.

[This is very different from creating Adam as fully grown, looking like a 20-year-old, say, although he was really only a few minutes old. Here there is no deception, because God has *told* us that he created Adam from the dust, therefore there *cannot* be any history of growing for 20 years from an infant. But God has also told us that the stars are real, and that they are signs, not just apparitions from light waves.4]

‘There is every reason to anticipate a logical scientific explanation for all that we see. We don’t deny that some research is still needed, as we don’t yet know all the details—just as big bang theorists face various problems and challenges.’

解决问题

约翰并不满足于简单地指出光年只是距离的度量，而是试图从圣经的框架中解释遥远的星光： “在我看来，《圣经》是真实的，星星是在第四天创造的。是的，宇宙很大，但我们也有一位非常伟大的上帝。 我个人的观点是，这个解释可能涉及到创造周期间的一定数量的奇迹活动。 我们有充分的理由对我们所看到的一切期待一个合乎逻辑的科学解释。 “但我不相信我们看到任何虚假信息，比如“光在途中产生”。 这意味着我们会看到来自并不存在的天体的光。 甚至光似乎表明了物理定律可预测的精确事件序列，但实际上从未发生过。 实际上，这将上帝描绘成一个骗子。 [这与将亚当创造为完全成熟的人有很大不同，比如，他看起来像 20 岁的孩子，尽管他实际上只有几分钟大。 这里没有欺骗，因为神告诉我们，他用尘土创造了亚当，因此不可能有从婴儿开始二十年成长的历史。 但上帝也告诉我们，星星是真实的，它们是迹象，而不仅仅是光波的幻影。4] “我们有充分的理由对我们所看到的一切期待一个合乎逻辑的科学解释。 我们并不否认仍然需要进行一些研究，因为我们还不知道所有细节——就像大爆炸理论家面临着各种问题和挑战一样。

In fact, John thinks this is an exciting time to be a Christian, particularly in the area of cosmology. He thinks that [Dr Russell Humphreys’](https://creation.com/d-russell-humphreys) book *Starlight and Time* has broken new ground for creation researchers in this area.

‘What Humphreys has done’, he says, ‘is show us another parameter of something that most people view as a constant, and that is *time* itself. Using Einstein’s Theory of General Relativity, he has shown how time can vary depending on your position in space—it affects your viewpoint. Time is slowed by gravitational forces. A clock at sea level has been shown to run more slowly than one on top of a mountain, because the one at sea level is affected by more gravity. This is an effect known as *time dilation*, and has been experimentally demonstrated.

‘Humphreys uses this to great effect in his model to deal with the distant starlight issue. His cosmology starts with the earth near the centre originally, then the universe rapidly expanding in a “white hole” or black hole running in reverse. At the beginning, gravity would slow earth “clocks” far more than clocks further away, especially at the edge of the universe. Therefore, “billions of years” would be available (measured by clocks in those distant regions of space) for light to reach the earth, for stars to age, etc.—while less than one ordinary day is passing on earth (measured by earth clocks, on which biblical time is based).’

事实上，约翰认为对于基督徒来说这是一个激动人心的时刻，特别是在宇宙学领域。 他认为拉塞尔·汉弗莱斯博士的著作《星光与时间》为这一领域的创造研究人员开辟了新天地。 他说，“汉弗莱斯所做的是向我们展示了大多数人视为常数的另一个参数，那就是时间本身。” 他利用爱因斯坦的广义相对论，展示了时间如何根据你在空间中的位置而变化——它会影响你的视角。 时间因重力而减慢。 事实证明，海平面上的时钟比山顶上的时钟走得慢，因为海平面上的时钟受到更多重力的影响。 这是一种称为时间膨胀的效应，并已被实验证明。 汉弗莱斯在他的模型中利用这一点来处理遥远的星光问题，效果非常好。 他的宇宙论最初是从地球靠近中心开始的，然后宇宙在一个反向运行的“白洞”或黑洞中迅速膨胀。 一开始，重力会使地球“时钟”的速度比更远的时钟慢得多，尤其是在宇宙边缘。 因此，光到达地球、恒星老化等需要“数十亿年”（通过那些遥远太空区域的时钟来测量），而地球上过去的时间还不到平常的一天（通过地球来测量） 时钟，圣经时间就是以此为基础的）。

**Cutting-edge research**

[](https://dl0.creation.com/articles/p001/c00132/John_crystals_3.jpg)John Hartnett with crystals.  


**Sophisticated sapphires**

Dr John Hartnett showed us these man-made sapphires. Very pure crystals of aluminium oxide, they are used in the oscillator pumps his team develops for atomic clocks. He said, ‘The ones we are using in our clocks right now would cost around US$20,000 each.

We’re currently working with the European Space Agency in developing technology to test their atomic clock that is going to be used on the International Space Station. The precision of clocks like those can be used to measure the effects that gravity has upon time, even on earth.’

John’s current work is directly related to this field. As a research fellow with a prestigious secular university, he is part of a team that develops technology for very precise atomic clocks (see box). He explained that the clocks are so precise that they might only gain or lose about one second of time every 400 million years. ‘They tick so fast—about 10 billion times a second—that we can directly measure infinitesimal losses.’

前沿研究

约翰·哈内特与水晶。

精致的蓝宝石 约翰·哈内特博士向我们展示了这些人造蓝宝石。 非常纯净的氧化铝晶体，用于他的团队为原子钟开发的振荡器泵中。 他说：“我们现在在时钟中使用的时钟每个价格约为 20,000 美元。 我们目前正在与欧洲航天局合作开发技术来测试将在国际空间站上使用的原子钟。 像这样的时钟的精度可以用来测量重力对时间的影响，甚至在地球上也是如此。 约翰目前的工作与该领域直接相关。 作为一所著名世俗大学的研究员，他是开发非常精确原子钟技术的团队的一员（见方框）。 他解释说，时钟非常精确，每 4 亿年可能只会增加或减少约一秒的时间。 “它们的速度如此之快——大约每秒 100 亿次——以至于我们可以直接测量无穷小的损失。”

**Cosmology and Christianity**

John adds that since he became a Christian, he regards it as his ‘calling’ to make cosmology more understandable for the average layperson. He says, ‘Modern ideas about the origin of the universe contain lots of complicated mathematical theories and formulas. Many people are duped into thinking that because two plus two equals four, the maths of the big bang must be right. But in most cases, these formulas are not provable or testable—they remain completely theoretical, and the models they support are based on unprovable starting assumptions. Christians, in particular, should not be worried about this.’

He is particularly critical of Dr Hugh Ross’s beliefs. That is, Ross ‘reinterprets’ Scripture to claim the days of [Genesis 1](https://biblia.com/bible/esv/Gen%201) were long ages, and tries to use the big bang as a proof of Christianity. He observes, ‘Hugh Ross is on very shaky ground—placing his faith in this model, particularly when the real big bang leaders seem not to agree that the theory implies a creator.’

When I asked him about his history as a Christian, he reminisced about his young co-author friend. He recalls, ‘He got saved, and I became quite bitter towards him and other Christians. I used to go along to meetings and torment them. At one meeting I even tipped over a table full of books and stuff. I challenged them on evolution and origins, and they always avoided the subject. Looking back, though, I can remember having some doubts—a sort of belief in God, so if someone could have shown me some scientific basis like creation—in the Bible—I think it would have had a big impact on me.’

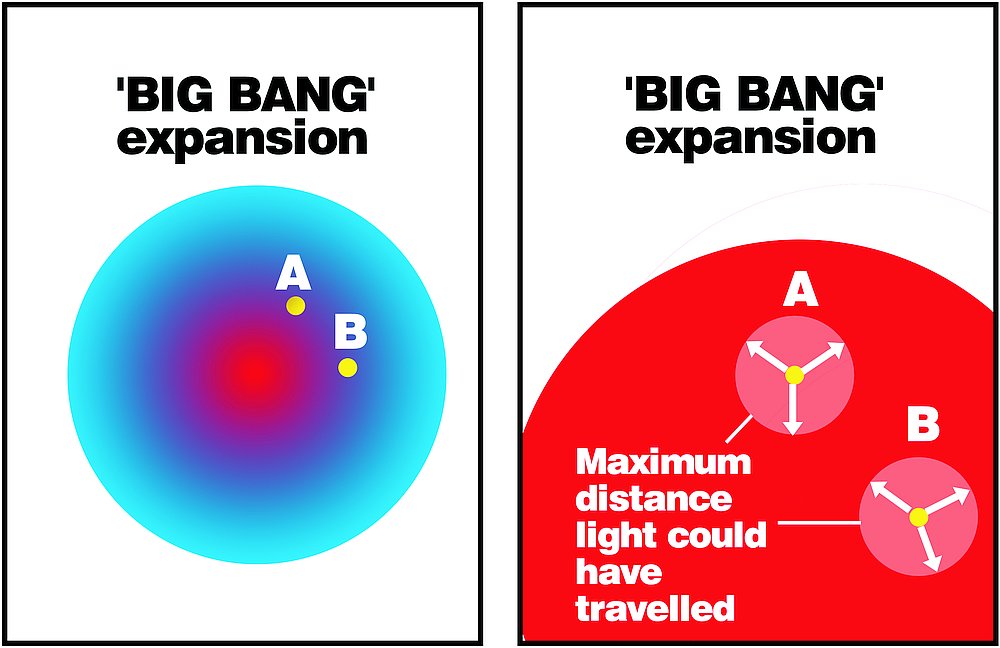
Years went by, and John became a Christian during the third year of his undergraduate degree in physics. Meeting other Christians after that, one young man challenged him to read Genesis, saying, ‘Read the first part, and when you’re finished, I’ll come back and talk to you.’ John says, ‘When I started reading it—it was like—wow, unbelievably amazing. Straight away it struck me that this could be completely consistent with the scientific evidence and the knowledge I had at that time. I was being converted into a creationist there and then.’

In their enthusiasm, John (by now married) and his wife strayed for a while into a quasi-Christian cult. He remarks, ‘We thought we were serving God—we were so keen. But looking back, I don’t think we ever really fitted in, and we now realize our mistake.’

John realizes that the distant starlight issue is a major stumbling block to belief in the Bible; the controversy, he says, is aimed squarely at the Genesis account of creation, which is foundational to the Gospel. He says, ‘I can understand it being an issue—it was a problem for me, too. But now I know that God did create it all, and when He says He did, I’m just eager to find out more about how. And, in the process, to help Christians give increasingly powerful answers to defend and share their faith.’

宇宙论和基督教 约翰补充说，自从他成为基督徒以来，他认为让普通外行人更容易理解宇宙学是他的“使命”。 他说：“关于宇宙起源的现代思想包含许多复杂的数学理论和公式。 许多人被欺骗，认为因为二加二等于四，所以大爆炸的数学必然是正确的。 但在大多数情况下，这些公式是不可证明或可测试的——它们仍然完全是理论性的，它们支持的模型基于无法证明的初始假设。 尤其是基督徒，不应该为此担心。 他对休·罗斯博士的信仰尤其持批评态度。 也就是说，罗斯“重新解释”圣经，声称创世记第一章的时代是漫长的时代，并试图用大爆炸作为基督教的证据。 他观察到，“休·罗斯对这个模型的信心非常不稳定，特别是当真正的大爆炸领导者似乎不同意该理论暗示着创造者时。” 当我问他作为基督徒的历史时，他回忆起了他年轻的合著者朋友。 他回忆说，‘他得救了，我对他和其他基督徒变得非常痛苦。 我过去常去参加会议并折磨他们。 在一次会议上，我什至打翻了一张摆满书籍和东西的桌子。 我向他们提出进化论和起源问题，但他们总是回避这个话题。 不过，回想起来，我记得有一些疑问——一种对上帝的信仰，所以如果有人能向我展示一些科学基础，比如《圣经》中的创造——我想这会对我产生很大的影响。 几年过去了，约翰在物理本科三年级时成为了一名基督徒。 此后，在与其他基督徒见面时，一位年轻人挑战他读创世记，说：“读第一部分，当你读完后，我会回来和你说话。”约翰说，“当我开始读它时 ——就像——哇，令人难以置信的惊人。 我立刻意识到这可能与科学证据和我当时所掌握的知识完全一致。 那时我就被转变为神创论者。 出于热情，约翰（现已结婚）和他的妻子有一段时间误入了准基督教邪教。 他评论道：“我们以为自己在侍奉上帝——我们是如此热衷。 但回想起来，我认为我们并没有真正融入其中，现在我们意识到了我们的错误。” 约翰意识到遥远的星光问题是信仰圣经的主要绊脚石； 他说，这场争论直接针对创世记中关于创造的记载，而这是福音书的基础。 他说：“我可以理解这是一个问题——这对我来说也是一个问题。” 但现在我知道上帝确实创造了这一切，当他说他创造了这一切时，我只是渴望了解更多有关如何创造的信息。 并且在此过程中，帮助基督徒给出越来越有力的答案来捍卫和分享他们的信仰。

**Light-travel time: a problem for the big bang**

[](https://dl0.creation.com/articles/p001/c00167/167-light-diagram.jpg)(1) Early in the alleged big bang, points A and B start out with different temperatures.  
(2) Today, points A and B have the same temperature, yet there has not been enough time for them to exchange light.

by [Jason Lisle, Ph.D.](https://creation.com/dr-jason-lisle)

The ‘distant starlight problem’ is sometimes used as an argument against biblical creation. People who believe in billions of years often claim that light from the most distant galaxies could not possibly reach earth in only 6,000 years. However, the light-travel–time argument cannot be used to reject the Bible in favour of the big bang, with its billions of years. This is because the big bang model *also* has a light-travel–time problem.

**The background**

In 1964/5, Penzias and Wilson discovered that the earth was bathed in a faint microwave radiation, apparently coming from the most distant observable regions of the universe, and this earned them the Nobel Prize for Physics in 1978.1 This Cosmic Microwave Background (CMB) comes from all directions in space and has a characteristic temperature.2,3 While the discovery of the CMB has been called a successful prediction of the big bang model,4 it is actually a *problem* for the big bang. This is because the precisely uniform temperature of the CMB creates a light-travel–time problem for big bang models of the origin of the universe.

光行时间：大爆炸的一个问题 (1) 在所谓的大爆炸早期，A 点和 B 点开始时具有不同的温度。 (2) 今天，A 点和 B 点温度相同，但还没有足够的时间进行光线交换。 作者：杰森·莱尔博士 “遥远的星光问题”有时被用来作为反对圣经创造的论据。 相信数十亿年的人经常声称，来自最遥远星系的光不可能在短短 6000 年内到达地球。 然而，光旅行时间论证不能用来拒绝《圣经》，转而支持有数十亿年的大爆炸。 这是因为大爆炸模型也存在光传播时间问题。 的背景 1964年5月，彭齐亚斯和威尔逊发现地球沐浴在微弱的微波辐射中，显然来自宇宙最遥远的可观测区域，这为他们赢得了1978年诺贝尔物理学奖。1这种宇宙微波背景（CMB） 来自空间各个方向，具有特征温度。2,3虽然宇宙微波背景的发现被称为大爆炸模型的成功预测，4但它实际上是大爆炸的一个问题。 这是因为宇宙微波背景精确均匀的温度给宇宙起源的大爆炸模型带来了光传播时间问题。

**The problem**

The temperature of the CMB is essentially the same everywhere5—in all directions (to a precision of 1 part in 100,000).6 However (according to big bang theorists), in the early universe, the temperature of the CMB7 *would have been very different at different places in space due to the random nature of the initial conditions*. These different regions could come to the same temperature if they were in close contact. More distant regions would come to equilibrium by exchanging radiation (i.e. light8). The radiation would carry energy from warmer regions to cooler ones until they had the same temperature.

The problem is this: even assuming the big bang timescale, there has not been enough time for light to travel between widely separated regions of space. So, how can the different regions of the current CMB have such precisely uniform temperatures if they have never communicated with each other?9 *This is a light-travel–time problem*.10

How can one side of the visible universe ‘know’ about the other side if there has not been enough time for the information to be exchanged?

The big bang model assumes that the universe is many billions of years old. While this timescale is sufficient for light to travel from distant galaxies to earth, it does not provide enough time for light to travel from one side of the visible universe to the other. At the time the light was emitted, supposedly 300,000 years after the big bang, space already had a uniform temperature over a range at least ten times larger than the distance that light could have travelled (called the ‘horizon’).11 So, how can these regions look the same, i.e. have the same temperature? How can one side of the visible universe ‘know’ about the other side if there has not been enough time for the information to be exchanged? This is called the ‘horizon problem’.12 Secular astronomers have proposed many possible solutions to it, but no satisfactory one has emerged to date (see [Attempts to overcome the big bang’s ‘light-travel–time problem’](https://creation.com/light-travel-time-a-problem-for-the-big-bang#LightTravel)).

问题

CMB 的温度在各个方向上基本上都是相同的（精确到十万分之一）。6 然而（根据大爆炸理论家的说法），在早期宇宙中，CMB7 的温度会非常不同 由于初始条件的随机性，在空间的不同位置。 如果这些不同的区域紧密接触，它们可能会达到相同的温度。 更远的区域将通过交换辐射（即光8）达到平衡。 辐射会将能量从较温暖的地区带到较冷的地区，直到它们具有相同的温度。 问题是这样的：即使假设大爆炸的时间尺度，光也没有足够的时间在相距较远的空间区域之间传播。 那么，如果当前宇宙微波背景的不同区域从未相互通信，它们如何能拥有如此精确均匀的温度呢？9这是一个光行时间问题。10 如果没有足够的时间交换信息，可见宇宙的一侧如何“了解”另一侧？ 大爆炸模型假设宇宙已有数十亿年的历史。 虽然这个时间尺度足以让光从遥远的星系传播到地球，但它并没有为光从可见宇宙的一侧传播到另一侧提供足够的时间。 在光发出时，据说是大爆炸后 30 万年，空间已经具有均匀的温度，其范围至少比光可以传播的距离（称为“地平线”）大十倍。 11 那么，如何 这些区域看起来可以相同，即具有相同的温度吗？ 如果没有足够的时间交换信息，可见宇宙的一侧如何“了解”另一侧？ 这被称为“地平线问题”。12世俗天文学家对此提出了许多可能的解决方案，但迄今为止尚未出现令人满意的解决方案（请参阅克服大爆炸的“光行时间问题”的尝试）。

**Summing up**

The big bang requires that opposite regions of the visible universe must have exchanged energy by radiation, since these regions of space look the same in CMB maps. But there has not been enough time for light to travel this distance. Both biblical creationists and big bang supporters have proposed a variety of possible solutions to light-travel–time difficulties in their respective models. So big-bangers should not criticize creationists for hypothesizing potential solutions, since they do the same thing with their own model. The horizon problem remains a serious difficulty for big bang supporters, as evidenced by their many competing conjectures that attempt to solve it. Therefore, it is inconsistent for supporters of the big bang model to use light-travel time as an argument against biblical creation, since their own notion has an equivalent problem.

**Attempts to overcome the big bang’s ‘light-travel–time problem’**

Currently, the most popular idea is called ‘inflation’—a conjecture invented by Alan Guth in 1981. In this scenario, the expansion rate of the universe (i.e. space itself) was vastly accelerated in an ‘inflation phase’ early in the big bang. The different regions of the universe were in very close contact before this inflation took place. Thus, they were able to come to the same temperature by exchanging radiation *before* they were rapidly (faster than the speed of light13) pushed apart. According to inflation, even though distant regions of the universe are not in contact today, they were in contact before the inflation phase when the universe was small.

However, the inflation scenario is far from certain. There are many different inflation models, each with its set of difficulties. Moreover, there is no consensus on which (if any) inflation model is correct. A physical mechanism that could cause the inflation is not known, though there are many speculations. There are also difficulties on how to turn off the inflation once it starts—the ‘graceful exit’ problem.14 Many inflation models are known to be wrong—making predictions that are not consistent with observations,15 such as Guth’s original model.16 Also, many aspects of inflation models are currently unable to be tested.

Some astronomers do not accept inflationary models and have proposed other possible solutions to the horizon problem. These include: scenarios in which the gravitational constant varies with time,17 the ‘ekpyrotic model’ which involves a cyclic universe,18 scenarios in which light takes ‘shortcuts’ through extra (hypothetical) dimensions,19 ‘null-singularity’ models,20 and models in which the speed of light was much greater in the past.21,22 (Creationists have also pointed out that a changing speed of light may solve light-travel–time difficulties for biblical creation.23)

In light of this disagreement, it is safe to say that the horizon problem has not been decisively solved.

加起来

大爆炸要求可见宇宙的相对区域必须通过辐射交换能量，因为这些空间区域在宇宙微波背景图中看起来是相同的。 但光没有足够的时间传播这么远的距离。 圣经神创论者和大爆炸支持者都在各自的模型中提出了多种可能的解决方案来解决光旅行时间的困难。 因此，大爆炸者不应该批评神创论者假设潜在的解决方案，因为他们用自己的模型做了同样的事情。 对于大爆炸支持者来说，地平线问题仍然是一个严重的难题，他们试图解决这个问题的许多相互竞争的猜想就证明了这一点。 因此，大爆炸模型的支持者用光旅行时间作为反对圣经创造的论据是不一致的，因为他们自己的观念也有同样的问题。 尝试克服大爆炸的“光行时间问题” 目前，最流行的想法被称为“暴胀”——这是艾伦·古斯 (Alan Guth) 在 1981 年提出的猜想。在这种情况下，宇宙（即空间本身）的膨胀率在大爆炸早期的“暴胀阶段”大大加速 。 在这次暴胀发生之前，宇宙的不同区域联系非常紧密。 因此，它们能够通过交换辐射达到相同的温度，然后再迅速（比光速更快）被推开。 根据暴胀理论，尽管今天宇宙中遥远的区域没有接触，但在宇宙很小的暴胀阶段之前，它们就已经接触过。 然而，通货膨胀的情况还远未确定。 有许多不同的通货膨胀模型，每种模型都有其一系列的困难。 此外，对于哪种（如果有的话）通胀模型是正确的还没有达成共识。 尽管有很多猜测，但可能导致通货膨胀的物理机制尚不清楚。 一旦通货膨胀开始，如何关闭它也存在困难——“优雅退出”问题。14众所周知，许多通货膨胀模型是错误的——做出的预测与观察结果不一致，15例如古斯的原始模型。16 ，通货膨胀模型的许多方面目前无法进行测试。 一些天文学家不接受暴胀模型，并提出了解决地平线问题的其他可能的解决方案。 其中包括：引力常数随时间变化的场景，17涉及循环宇宙的“火热模型”，18光通过额外（假设）维度走“捷径”的场景，19“零奇点”模型，20 以及过去光速要大得多的模型。21,22（神创论者还指出，光速的变化可能会解决圣经创造中的光传播时间困难。23） 鉴于这种分歧，可以肯定地说，地平线问题尚未得到彻底解决。

**Hubble, hubble, big bang in trouble?**

by [Carl Wieland](https://creation.com/dr-carl-wieland)

Many of the most favored big bang versions are already having severe problems thanks to the findings of new instruments, such as the Hubble space telescope.

wikimedia commons The Hubble Space Telescope - causing severe problems for many of the most favoured versions of the 'Big bang'.

For example, some measurements which were used to calculate the rate of the universe’s expansion (if indeed the ‘red shift’ of light means expansion at all) would have meant (if such cosmic evolutionary speculations were factual) that the universe was younger than the alleged ages of some of its stars!

As optical telescopes are improved, enabling astronomers to look ever further out into space, ‘big bangers’ have eagerly expected that there would be a consistent pattern found, such that at greater red shifts (assumed to be bigger distances) there would be ever ‘younger’ (in cosmic evolutionary terms) galaxies.

It turns out that most of the galaxies at high red shifts are indeed dominated by blue stars (this is the colour which present theory expects from stars which have not been burning as long as red ones), and there is a ‘striking variety of shapes’. While this is not very specific, it does match the big bangs’ expectations in a general sense. It could also match a number of creationist cosmological scenarios.

However, it only takes one black swan to disprove the notion that all swans are white, and there are in fact several galaxies in the same red-shift zone which are not blue, but red. The ‘most perplexing’ such galaxy to date has an apparent age (again according to evolutionary theories) of 3.5 billion years, which is far too ‘old’ for a galaxy at such an allegedly early stage (red shift 1.5) of the universe’s history.1

哈勃，哈勃，大爆炸遇到麻烦了吗？

卡尔·维兰德

由于哈勃太空望远镜等新仪器的发现，许多最受欢迎的大爆炸版本已经遇到了严重的问题。 哈勃太空望远镜 - 给许多最受欢迎的“大爆炸”版本带来了严重问题。 例如，一些用于计算宇宙膨胀率的测量（如果光的“红移”确实意味着膨胀）将意味着（如果这种宇宙进化推测是事实）宇宙比宇宙更年轻。 据称其中一些明星的年龄！ 随着光学望远镜的改进，使天文学家能够观察更远的太空，“大佬们”热切地期望能够找到一致的模式，这样在更大的红移（假设距离更大）下，就会出现“ 更年轻的（宇宙进化术语）星系。 事实证明，大多数处于高红移的星系确实以蓝色恒星为主（这是当前理论所期望的恒星的颜色，这些恒星燃烧的时间不像红色恒星那么长），并且存在“惊人的各种形状” '。 虽然这不是很具体，但它确实符合大爆炸在一般意义上的期望。 它还可以匹配一些神创论的宇宙论场景。 然而，只需要一只黑天鹅就可以反驳所有天鹅都是白色的观点，而且实际上在同一红移区内有多个星系不是蓝色的，而是红色的。 迄今为止“最令人费解”的此类星系的表观年龄（同样根据进化论）为 35 亿年，这对于处于宇宙历史如此早期阶段（红移 1.5）的星系来说太“古老”了 .1

**The end of the big bang?**

In addition, the distant universe is causing a headache by being far too ‘clumpy’ for the popular big bang scenario. About a decade ago, astronomers doing large-scale 3-D ‘mapping’ of positions of galaxies were surprised to find that the universe was incredibly ‘clumpy’, with huge sheets of galaxies, one dubbed the ‘Great Wall’, alternating with massive ‘voids’. Even back then, it was stated that there should not have been enough time for an exploding mass to form such large-scale structures.

Although cosmologists had a hard time learning to live with this reality, they could at least comfort themselves with the knowledge that the ‘early universe’ would turn out to better match their predictions—by looking back (i.e. out) far enough, the universe would get progressively ‘smoother’.

Unfortunately for the theory, it is beginning to look as if it is just as lumpy a long way out. Preliminary observations strongly suggest that there are many ‘structures the size and shape of the Great Wall, but dozens of times farther away’.2 In fact, such clustering is turning up in one part of the sky that ‘includes the faintest and most distant galaxies observed’.3

大爆炸的终结？

此外，遥远的宇宙对于流行的大爆炸场景来说过于“块状”，这也令人头痛。 大约十年前，天文学家对星系位置进行大规模 3D“测绘”，惊讶地发现宇宙非常“块状”，有巨大的星系片，其中一个被称为“长城”，与巨大的星系片交替出现。 '空隙'。 即使在当时，人们也认为爆炸质量应该没有足够的时间来形成如此大规模的结构。 尽管宇宙学家很难学会接受这个现实，但他们至少可以安慰自己，因为他们知道“早期宇宙”会更好地符合他们的预测——通过向后看（即向外）足够远的距离，宇宙会 逐渐变得“平滑”。 不幸的是，对于这个理论来说，它开始看起来似乎还有很长的路要走。 初步观察强烈表明，存在许多“结构的大小和形状与长城相同，但距离远数十倍”。2 事实上，这种聚集现象正在天空的某个部分出现，其中“包括最微弱和最遥远的星团”。 观测到的星系'.3

wikimedia commons Edwin Hubble.

Will this mean the end of the big bang? We suspect not, because this model has long been noted by some to be sufficiently vague to be remarkably flexible. Presumably, if the past is any guide, ‘twiddling a few more knobs’ on the model will probably be able to ‘salvage’ it once more. There are all manner of variables which can be shuffled at will in computer models—changes in the expansion rate, the density of mass in the universe (one can assume almost any amount of invisible ‘dark matter’), the existence of a hypothetical ‘cosmological constant’—there have even been suggestions that the law of gravity may not have been the same in the ‘early universe’.

Therefore it is no surprise that the seeming conflict between the age of the universe and the age of some if its stars has ‘almost’ been solved by some frantic adjustments. The calculations giving ‘ages’ of the oldest stars range from 12 to 15 billion years; astronomers now are coming to agreement on an ‘age’ range of the universe of 8 to 12 billion years.4 As close as the overlap is, it is enough to save the day—for the moment.

埃德温·哈勃。

这是否意味着大爆炸的结束？ 我们怀疑不会，因为一些人长期以来一直认为这个模型足够模糊，但非常灵活。 据推测，如果过去有任何指导的话，在模型上“再调整几个旋钮”可能能够再次“挽救”它。 在计算机模型中，有各种各样的变量可以随意调整——膨胀率的变化、宇宙中质量的密度（人们可以假设几乎任何数量的不可见的“暗物质”）、假设的“暗物质”的存在。 宇宙学常数”——甚至有人提出，万有引力定律在“早期宇宙”中可能并不相同。 因此，宇宙年龄与某些恒星年龄之间看似冲突的现象“几乎”已经通过一些疯狂的调整得到了解决，也就不足为奇了。 计算得出的最古老恒星的“年龄”范围为 12 至 150 亿年； 天文学家现在就宇宙的“年龄”范围在 8 到 120 亿年之间达成一致。4 尽管重叠的距离很近，但暂时足以挽救局面。

**Red shifts**

However, there is another set of awkward, uncomfortable observations which have loomed in the background for around 20 years now, which, if correct, have been said to have awesome implications, even to the extent of being the deathknell for any big bang concept. The observation is the ‘quantization of red shifts’, and has even been said to undermine the very idea that the universe is expanding.

What is it about? Astronomer William Tifft of the University of Arizona was the first to claim that the red shifts (the degree to which the light from stars is shifted to the red end of the spectrum, which is supposed to measure the speed at which the star is moving away, and hence how far away it is) of galaxies fall into distinct packets or quanta, like the rungs of a ladder. This would be like saying that if you measured the speed of particles coming out of an explosion, instead of being evenly distributed across a range of velocities, they fell into groups, for example, 100 kilometers an hour, 200 km/in, 300 km/in and so on.

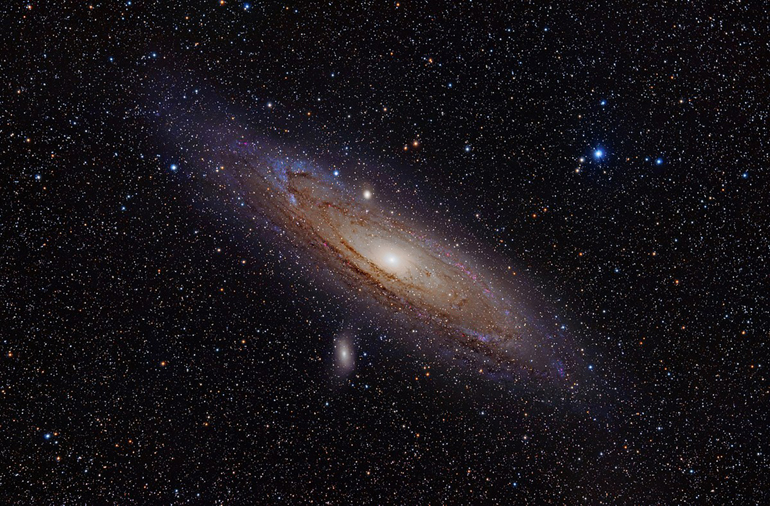
Tifft was ignored at first, but continued to amass data for many years, most showing the same effect. Now, in a major study of more than 200 galaxies, using very sensitive equipment, two UK astronomers, Oxford’s Bill Napier and Bruce Guthrie from Edinburgh, claim to have ‘the best evidence yet’ that the phenomenon is real.5

This time, even some former skeptics of the claim are taking it seriously enough to warrant getting involved in the debate, suggesting proposals to test it further, and so on.

Mike Disney of Cardiff’s University of Wales says that if it keeps on holding up, it might turn standard cosmology ‘on its ear’. He says, ‘it would mean abandoning a great deal of present research’. All attempts to try to explain it within conventional models are, to put it mildly, ‘highly unorthodox’, and it is stated that if it does survive the next round of tests, ‘theorists will have a sticky problem trying to explain it’.

红移

然而，还有另一组尴尬、令人不安的观察结果已经隐现了大约 20 年，如果它们是正确的，据说会产生可怕的影响，甚至可以为任何大爆炸概念敲响丧钟。 这一观察结果是“红移的量子化”，甚至据说破坏了宇宙正在膨胀的观点。 这是关于什么的？ 亚利桑那大学的天文学家威廉·蒂夫特 (William Tifft) 第一个提出红移（恒星发出的光向光谱红端移动的程度，旨在测量恒星远离的速度） ，因此它有多远）的星系落入不同的数据包或量子中，就像梯子的横档一样。 这就像说，如果你测量爆炸中粒子的速度，它们不会均匀分布在一定的速度范围内，而是会分成几组，例如每小时 100 公里、200 公里/英寸、300 公里 /in 等等。 蒂夫特最初被忽视，但多年来继续积累数据，大多数都显示出相同的效果。 现在，在使用非常敏感的设备对 200 多个星系进行的一项重大研究中，两位英国天文学家（牛津大学的比尔·纳皮尔和爱丁堡的布鲁斯·格思里）声称拥有“迄今为止最好的证据”证明这种现象是真实的。 5 这一次，甚至一些以前对该说法持怀疑态度的人也足够认真地对待它，以保证参与辩论，提出进一步测试它的建议，等等。 卡迪夫威尔士大学的迈克·迪士尼表示，如果它继续坚持下去，它可能会“改变”标准宇宙学。 他说，“这意味着放弃目前的大量研究”。 温和地说，所有试图用传统模型解释它的尝试都是“高度非正统的”，并且据说，如果它确实能够通过下一轮测试，“理论家在试图解释它时将遇到一个棘手的问题”。

wikimedia commons The Andromeda Galaxy.

James Peebles of Princeton, whose pet big bang cosmology is the big loser if this is right, says he treats the claims with ‘extreme caution’ for this very reason, saying that he is ‘not being dogmatic and saying it can’t happen, but if it does, it‘s a real shocker’.

However, the data are already very impressive. According to Bill Napier they tried hard to avoid concluding that the red shifts were quantized, but failed.

There seems little doubt that if these observations did not conflict with the big bang, they would have been taken much more seriously a long time ago. The problem seems to be, as prominent astronomer Geoffrey Burbidge put it (Burbidge is Professor of Physics at the University of California, San Diego):

‘Big bang cosmology is probably as widely believed as has been any theory of the universe in the history of Western civilization. It rests, however, on many untested, and [in] many cases, untestable assumptions. Indeed, big bang cosmology has become a bandwagon of thought that reflects faith as much as objective truth.’6

Unfortunately, some of those who promote the alleged big bang as an article of faith are Christians.

Unfortunately, some of those who promote the alleged big bang as an article of faith are Christians. They claim it is a fact of nature, which must therefore be accepted, and Genesis must be reinterpreted to suit this and other concepts held by evolutionists.

Such ‘facts of nature’, in their view, are a source of revelation on a par with the Bible. For example, Dr Hugh Ross writes, ‘The facts of nature may be likened to a sixty-seventh book of the Bible’.7

The problem with this idea, now being enthusiastically embraced by many leading evangelicals, comes when one has to face up to the reality that all such ‘facts’ can only ever be the interpretations and conclusions of fallible, finite people, biased by nature against their Maker.

Many who have been swayed by such attempts to harmonize the Bible with evolutionism will have to hunt around for a new ‘interpretation’ of Genesis if (or perhaps one should say when) the big bang is discarded by the secular world in their lifetime. Of course, such abandonment would only be undertaken once an alternative concept had been thought up, one which fitted the data at least well enough to continue to assist an unbelieving world in its vain attempt to try to explain the origin of the world without God.8

仙女座星系。

普林斯顿大学的詹姆斯·皮布尔斯（James Peebles）认为，如果这是正确的，他所钟爱的大爆炸宇宙学就是最大的输家。他表示，正是因为这个原因，他“极其谨慎”地对待这些说法，他说，他“并不是教条主义，也不是说这不可能发生， 但如果确实如此，那真是令人震惊。” 然而，数据已经非常可观了。 根据比尔·纳皮尔的说法，他们努力避免得出红移是量子化的结论，但失败了。 毫无疑问，如果这些观察结果与大爆炸没有冲突，它们很久以前就会受到更加认真的对待。 正如著名天文学家杰弗里·伯比奇所说（伯比奇是加州大学圣地亚哥分校的物理学教授），问题似乎是： “大爆炸宇宙学可能与西方文明史上的任何宇宙理论一样被广泛相信。 然而，它依赖于许多未经检验的、并且在许多情况下是无法检验的假设。 事实上，大爆炸宇宙学已经成为一种思想潮流，既反映了客观真理，也反映了信仰。”6 不幸的是，一些将所谓的大爆炸作为信仰的人是基督徒。 不幸的是，一些将所谓的大爆炸作为信仰的人是基督徒。 他们声称这是自然事实，因此必须接受，并且必须重新解释创世记以适应这一点以及进化论者所持有的其他概念。 在他们看来，这种“自然事实”是与圣经同等的启示来源。 例如，休·罗斯博士写道：“自然事实可以比作《圣经》的第六十七本书。”7 这个想法现在被许多领先的福音派人士热烈拥护，但当人们必须面对这样一个现实时，问题就出现了：所有这些“事实”只能是易犯错误的、有限的人的解释和结论，他们生来就对自己的观点存有偏见。 制作者。 如果（或者也许应该说何时）大爆炸在他们有生之年被世俗世界抛弃，许多被这种将圣经与进化论相协调的尝试所影响的人将不得不寻找对创世记的新“解释”。 当然，只有在想出另一种概念时才会采取这种放弃，这种概念至少与数据吻合得足以继续帮助一个不信的世界徒劳地试图解释没有上帝的世界的起源。 8

**Big bang universe “should not actually exist”**

**Antimatter still missing!**

by [Jonathan Sarfati](https://creation.com/dr-jonathan-sarfati)



The currently leading evolutionary cosmogony (Gk. ‘birth of the universe’) is the big bang theory. This basically says: nothing exploded and became everything. One part of this is energy turning into matter, as per the famous Einstein formula E = mc².

However, when this occurs, the standard laws of particle physics state that an *equal amount of matter and antimatter must be produced*. Yet our universe comprises overwhelmingly of matter, with only rare and fleetingly short-lived antimatter particles, produced for example in experimental high energy collisions. These are of the same mass but opposite charge (if the particle is charged) and magnetic moment1 as the corresponding matter particle, which they soon interact with and are mutually annihilated—antielectron (positron) with electron, antiproton with proton, antineutron with neutron, etc. How did matter survive annihilation from an equal amount of antimatter?

The big bang should have produced an equal amount of matter and antimatter. Yet our universe comprises overwhelmingly of matter.

Well, according to big bang proponents, most matter *was* annihilated by antimatter, forming the photons of the cosmic background radiation. And there are a billion of those photons for every proton. Therefore, they believe that the early universe contained a billion *and one* protons for every billion antiprotons—leaving just that one proton surviving.2

But for energy to produce this slight imbalance, there would need to be asymmetry in the fundamental makeup of the universe. So researchers at the European Organization for Nuclear Research, or CERN,3 in Meyrin, Switzerland, have been trying to find imbalances between protons and antiprotons.

The experiment showed that the *antiproton has an equal and opposite magnetic moment to the proton*. I.e. not enough asymmetry to explain the overabundance of matter!

大爆炸宇宙“实际上不应该存在”

反物质依然下落不明！ 作者：乔纳森·萨法蒂

当前领先的进化宇宙论（希腊语“宇宙的诞生”）是大爆炸理论。 这基本上是说：什么都没有爆炸，变成了一切。 其中一部分是能量转化为物质，根据著名的爱因斯坦公式 E = mc²。 然而，当这种情况发生时，粒子物理学的标准定律规定必须产生等量的物质和反物质。 然而，我们的宇宙绝大多数由物质组成，只有稀有且短暂的反物质粒子，例如在实验高能碰撞中产生的反物质粒子。 它们与相应的物质粒子具有相同的质量，但电荷相反（如果粒子带电）和磁矩1，它们很快就会与之相互作用并相互湮灭——反电子（正电子）与电子，反质子与质子，反中子与中子， 等量的反物质湮灭后，物质是如何幸存下来的？ 大爆炸应该产生等量的物质和反物质。 然而我们的宇宙绝大多数是由物质组成的。 嗯，根据大爆炸支持者的说法，大多数物质被反物质湮灭，形成宇宙背景辐射的光子。 每个质子对应十亿个光子。 因此，他们认为早期宇宙中每十亿个反质子就包含十亿零一个质子——只剩下一个质子幸存下来。2 但要使能量产生这种轻微的不平衡，宇宙的基本构成就需要存在不对称性。 因此，位于瑞士梅林的欧洲核研究组织（CERN）3 的研究人员一直在试图寻找质子和反质子之间的不平衡。 实验表明，反质子具有与质子相等且相反的磁矩。 IE。 没有足够的不对称性来解释物质的过剩！

The latest experiment has measured the magnetic moment of the antiproton 350 times more precisely than previously—to 1.5 parts per billion.4 This was a tremendously difficult experiment, because these antiprotons must be generated, then trapped by a powerful magnetic field to prevent them annihilating with a proton; and also because the magnetic moment is so *tiny*!

The experiment showed that the *antiproton has an equal and opposite magnetic moment to the proton*. I.e. not enough asymmetry to explain the overabundance of matter! This has so undermined the big bang cosmology that the lead researcher, Christian Smorra, said:

“All of our observations find a complete symmetry between matter and antimatter, which is why the universe should not actually exist.”5

Well, not a universe that formed in some big bang, anyway. Discoveries like this and others which shake confidence in the big bang might well lead to the secular world abandoning this belief in future, in favour of some other naturalistic origins myth.6 This should therefore be a lesson to those misguided Christian apologists who ‘marry’ Genesis to the big bang—they might well find themselves ‘widowed’ in the future. So they will need to reinterpret their reinterpretations, which were in any case biblically untenable.7

最新的实验测量的反质子磁矩比以前精确了 350 倍，达到十亿分之 1.5。4 这是一个极其困难的实验，因为必须产生这些反质子，然后用强大的磁场捕获它们以防止它们湮灭。 与质子； 还因为磁矩太小了！ 实验表明，反质子具有与质子相等且相反的磁矩。 IE。 没有足够的不对称性来解释物质的过剩！ 这严重破坏了大爆炸宇宙学，首席研究员克里斯蒂安·斯莫拉 (Christian Smorra) 表示： “我们所有的观察都发现物质和反物质之间完全对称，这就是为什么宇宙实际上不应该存在。”5 好吧，无论如何，宇宙不是在某种大爆炸中形成的。 像这样的发现和其他动摇人们对大爆炸信心的发现很可能会导致世俗世界放弃这种对未来的信念，转而支持其他一些自然主义起源神话。 6 因此，这应该成为那些“结婚”的被误导的基督教辩护者的一个教训。 从大爆炸的起源——他们很可能会发现自己在未来“丧偶”。 因此，他们需要重新解释他们的解释，无论如何，这在圣经上都是站不住脚的。7

**Can Christians add the big bang to the Bible?**

by [Russell Grigg](https://creation.com/russell-grigg)

Many Christians and others today see the big bang theory as a means of harmonizing what the Bible says about the origin of the universe with the current ‘pronouncements of science’.1 So we shall examine what the big bang theory involves, and compare this with what God actually says.

**The current big bang theory**

According to the current big bang theory,2 all the matter and energy in the universe, along with space and time, were once contained in a dimensionless point or singularity of infinite density and temperature. Some 13.8 billion years ago, this singularity briefly expanded due to a ‘[quantum fluctuation](https://creation.com/god-created-not-quantum-fluctuation)’, and then underwent exponential growth at many times the speed of light.

Some of the energy in this expansion formed subatomic particles, which after ~380,000 years combined to form atoms, mostly hydrogen with some helium and traces of lithium and deuterium. After ~700 million years, these atoms coalesced through gravity to form the first stars, called [Population III stars](https://creation.com/stellar-evolution-and-the-problem-of-the-first-stars),3 and [early galaxies](https://creation.com/young-galaxies-too-old-for-the-big-bang) emerged. More stars formed, including, after ~9 billion years, the [sun](https://creation.com/the-sun-our-special-star) from a [cloud of gas and dust that gravity shrank](https://creation.com/nebular-hypothesis) and fused to give off light. Then clouds of gas and dust (called the solar nebula) that were rotating around the sun eventually developed into the planets of our solar system, including our Earth. Over further millions of years, our Earth gradually cooled to its present state and somehow obtained water.

基督徒可以将大爆炸添加到圣经中吗？

作者：拉塞尔·格里格

今天，许多基督徒和其他人将大爆炸理论视为协调圣经关于宇宙起源的说法与当前“科学宣言”的一种手段。1 因此，我们将研究大爆炸理论所涉及的内容，并将其与 神实际上所说的。 当前的大爆炸理论 根据当前的大爆炸理论，2宇宙中的所有物质和能量以及空间和时间都曾经包含在密度和温度无限的无量纲点或奇点中。 大约138亿年前，这个奇点因“量子涨落”而短暂扩张，然后以光速数倍的指数增长。 这次膨胀中的一些能量形成了亚原子粒子，大约 38 万年后，这些粒子结合形成了原子，其中大部分是氢，还有一些氦以及微量的锂和氘。 约七亿年后，这些原子通过重力结合形成第一批恒星，称为第三族恒星3，并出现了早期星系。 更多的恒星形成了，其中包括约 90 亿年后，由气体和尘埃云形成的太阳，这些气体和尘埃云的引力收缩并融合而发出光。 然后，围绕太阳旋转的气体和尘埃云（称为太阳星云）最终发展成为太阳系的行星，包括我们的地球。 再过几百万年，我们的地球逐渐冷却到目前的状态，并以某种方式获得了水。

[](https://dl0.creation.com/articles/p133/c13324/6-days-creation-lge.jpg)

In the big bang theory, major points of contradiction to the Bible include:

1. The sun is said to exist before the earth, [contrary to Genesis 1](https://creation.com/evolution-v-genesis-order), which says God created the earth on Day One, but the sun and the stars on Day Four of Creation Week. Also, when God first created the earth, it was cool and dark, while the big bang postulates that the beginning was enormously hot and bright.
2. The big bang theory involves a gradual progressive formation of astronomical objects stretching over billions of years. This runs counter to one of the reasons for its appeal to Christians who have not thought it through carefully and so erroneously think of it as an abrupt one-time creation event. Such a gradual progression over vast ages is not an impression that scholarly minds of the past, prior to the popularity of the idea of vast ages ([in geology first](https://creation.com/charles-lyell-free-science-from-moses)), ever once gleaned from the Bible (cf. [Psalm 33:8–9](https://biblia.com/bible/esv/Ps%2033.8%E2%80%939)). God may well have created the [universe in an expanding state](https://creation.com/a-5d-spherically-symmetric-expanding-universe-is-young), but not over eons—we explain below why the Bible in fact specifically teaches *against* this long-age idea.

在大爆炸理论中，与圣经矛盾的主要点包括： 1. 据说太阳先于地球而存在，这与创世记第一章相反，创世记第一章说上帝在第一天创造了地球，但在创世周的第四天创造了太阳和星星。 此外，当上帝第一次创造地球时，地球是寒冷和黑暗的，而大爆炸则假设地球一开始是非常炎热和明亮的。 2. 大爆炸理论涉及天体在数十亿年的时间里逐渐形成的过程。 这与它吸引基督徒的原因之一背道而驰，因为基督徒没有仔细考虑过它，因此错误地认为它是一次突然的一次性创造事件。 这种跨越漫长岁月的渐进过程并不是过去的学术思想在漫长岁月概念流行之前（首先是地质学）从圣经中收集到的印象（参见诗篇 33:8-9） 。 上帝很可能在膨胀状态下创造了宇宙，但不是在亿万年的时间里——我们在下面解释为什么圣经实际上特别反对这种古老的想法。

**Why it matters**

**Problems in the present**

If what God says in the Bible about creation is deemed to be wrong or to need modernizing, this opens the door for non-believers to regard as wrong or needing modernizing other things that God says in the Bible. For example, everyone’s need for forgiveness of sin ([Acts 3:19](https://biblia.com/bible/esv/Acts%203.19)), or the certainty of future judgment by God ([Acts 17:31](https://biblia.com/bible/esv/Acts%2017.31)). Either the whole Bible truly is the Word of God or it is not; therefore it is not a mixture of bits that are not true alongside other bits of it that are true. For more on this, see [The authority of Scripture](https://creation.com/the-authority-of-scripture).

Big-bang-believing Christians are identified either as

1. ‘[progressive creationists](https://creation.com/creation-compromises-questions-and-answers#progressive)’ (who reject biological evolution and accept a real Adam and Eve, but have no problem with astronomical or geological evolution), or as

目前存在的问题 如果上帝在圣经中所说的有关创造的内容被认为是错误的或需要现代化，那么这就为非信徒打开了大门，认为上帝在圣经中所说的其他事情是错误的或需要现代化。 例如，每个人都需要罪得赦免（使徒行传 3:19），或者未来上帝审判的确定性（使徒行传 17:31）。 整本圣经要么真的是神的话语，要么不是； 因此，它不是不真实的部分与其他真实的部分的混合。 有关这方面的更多信息，请参阅圣经的权威。 相信大爆炸的基督徒被认为是 1.“进步神创论者”（他们拒绝生物进化并接受真正的亚当和夏娃，但对天文或地质进化没有问题），或作为

[](https://dl0.creation.com/articles/p133/c13324/death-suffering-disease-lge.jpg)Millions of years puts death, suffering, and disease all before Adam sinned, contrary to what God says in His Word, the Bible.

1. ‘[theistic evolutionists](https://creation.com/creation-compromises-questions-and-answers#theistic)’ (who believe God not only used astronomical and geological evolution, but also biological evolution to create living things).

In each case, huge problems arise if one adds millions of years to the timeframe of the Bible.

**Problems re the past**

With regard to man’s appearance on Earth, millions of years puts death, suffering, and diseases like cancer, arthritis and abscesses (visible in the fossil bones) all *before* Adam sinned, instead of as the *result* of Adam’s sin, which led to that perfect original world becoming cursed ([Genesis 3:17–19](https://biblia.com/bible/esv/Gen%203.17%E2%80%9319)).

But the Apostle Paul wrote that death was the *result* of sin, and that sin came into the world through one man, namely Adam ([Romans 5:12–14](https://biblia.com/bible/esv/Rom%205.12%E2%80%9314)).

See [The vital importance of the historical Adam](https://creation.com/review-of-adam-the-fall-and-original-sin) and [The Fall: a cosmic catastrophe](https://creation.com/the-fall-a-cosmic-catastrophe).

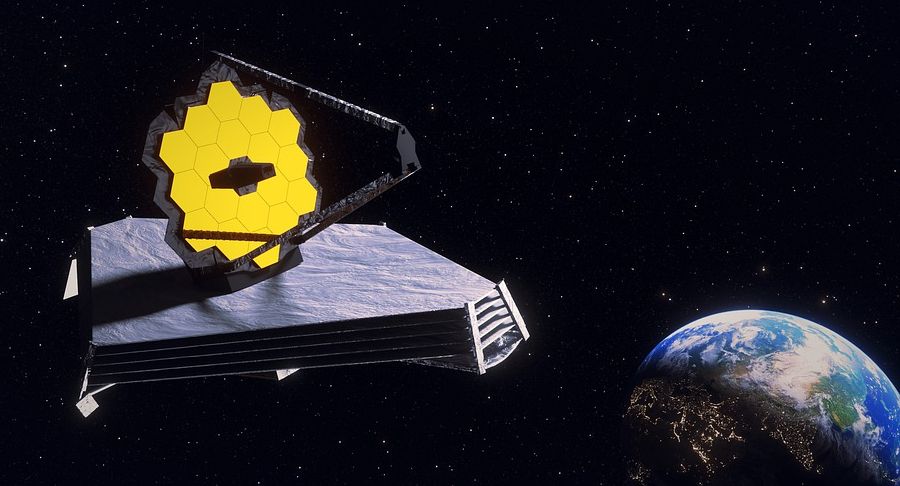
**Problems re the future**

Another aspect for big-bang-believing Christians is what the Bible says about the future, namely that God will create “new heavens and a new earth” ([2 Peter 3:13](https://biblia.com/bible/esv/2%20Pet%203.13); cf. [Isaiah 65:17](https://biblia.com/bible/esv/Isa%2065.17); [Revelation 21:1](https://biblia.com/bible/esv/Rev%2021.1)). So how long do long-agers allow for God to create the new heavens and the new Earth, if they maintain that it took Him billions of years to produce the present heavens and the present Earth?

数百万年的时间里，死亡、痛苦和疾病都发生在亚当犯罪之前，这与上帝在他的话语《圣经》中所说的相反。 2.“有神进化论者”（他们相信上帝不仅利用天文和地质进化，而且利用生物进化来创造生物）。 在每种情况下，如果将圣经的时间范围增加数百万年，就会出现巨大的问题。 过去的问题 关于人类在地球上的出现，数百万年把死亡、痛苦和癌症、关节炎和脓肿等疾病（在化石骨头中可见）都放在亚当犯罪之前，而不是亚当犯罪的结果，亚当的犯罪导致了完美的生活。 原来的世界受到咒诅（创世记 3：17-19）。 但使徒保罗写道，死亡是罪的结果，罪通过一个人，即亚当，来到了世界（罗马书 5：12-14）。 请参阅历史上的亚当和堕落的至关重要性：一场宇宙灾难。 未来的问题 对于相信大爆炸的基督徒来说，另一个方面是圣经对未来的说法，即上帝将创造“新天新地”（彼得后书 3:13；参见以赛亚书 65:17；启示录 21:1） 。 那么，如果长寿者认为上帝花了数十亿年才创造了现在的天堂和地球，那么他们会允许上帝创造新天和新地需要多长时间呢？

**New images from the James Webb Telescope**

**Do they challenge the Big Bang?**



Morgan B. wrote to us about the recently published images from the James Webb Space Telescope (JWST). JWST is a space telescope that has received a lot of media attention in the last few months. This telescope provided the best photos we have ever received of distant galaxies. In our previously published article on the [telescope](https://creation.com/the-james-webb-space-telescope), we explain what the big bang theorists predicted they would see through this telescope.

The photos from the JWST have now been published, and so Morgan B. is curious to know what the photos actually reveal to us.

Contrary to their predictions, we do not see these primitive structures. Instead, what they find are far more complex looking stars and galaxies. This suggests (given their assumptions about the age of the universe) that even 13.5 billion years ago, stars and galaxies were already very developed and mature.

I am aware that there have been images from the James Webb Telescope that have been released recently. I clearly don’t have a trained eye because these pictures don’t look as remarkable as I’ve seen them reported. However, I came across this article in my recommended [reading list] and I’m not sure what to make of it: (link removed as per feedback rules)

You all have a better grip on the science … than I do. Is this cause for celebration …? Is this information sound?

Thank you for taking the time to respond.

詹姆斯·韦伯望远镜的新图像 他们挑战大爆炸吗？ Morgan B. 写信给我们介绍了詹姆斯·韦伯太空望远镜 (JWST) 最近发布的图像。 JWST 是一架太空望远镜，在过去几个月中受到了媒体的广泛关注。 这台望远镜提供了我们收到的有关遥远星系的最佳照片。 在我们之前发表的关于望远镜的文章中，我们解释了大爆炸理论家预测他们将通过这台望远镜看到的东西。 来自 JWST 的照片现已发布，因此 Morgan B. 很想知道这些照片实际上向我们揭示了什么。 与他们的预测相反，我们没有看到这些原始结构。 相反，他们发现的是看起来更加复杂的恒星和星系。 这表明（考虑到他们对宇宙年龄的假设）即使在 135 亿年前，恒星和星系就已经非常发达和成熟。 我知道最近发布了詹姆斯·韦伯望远镜的图像。 我显然没有训练有素的眼睛，因为这些照片看起来并不像我看到的那样引人注目。 然而，我在推荐的[阅读列表]中看到了这篇文章，我不知道该怎么理解它：（根据反馈规则删除了链接） 你们对科学的掌握比我更好。 这是值得庆祝的理由吗……？ 这些信息可靠吗？ 感谢您抽出时间回复。

CMI-US’s [Bruce Lawrence](https://creation.com/bruce-lawrence) replies:

Thanks for writing in.

You have a keen eye. The fact that these pictures don’t look particularly remarkable is what makes so many people think they are remarkable. They are seen as remarkable because many cosmologists expected these galaxies, and stars to look like hypothetical primitive stars and galaxies. Instead, they look much more mature, and more like the stars and galaxies that we observe in portions of space that aren’t as far away from us. CMI has written about the James Webb Telescope before, and what those who believe in the big bang expect to [see](https://creation.com/the-james-webb-space-telescope).

**So, what does the James Webb Space Telescope (JWST) show?**

According to the big bang, the universe started much simpler, and slowly, over billions of years, modern stars and modern galaxies formed. They have created models that predict what these early galaxies and stars should look like.

“Webb will be a powerful time machine with infrared vision that will peer back over 13.5 billion years to see the first stars and galaxies forming out of the darkness of the early universe.”1

Big Bang theorists believe that by looking deep into space, they can reveal the ancient past of the universe. The idea here is that since light travels at a certain speed, light coming from stars that are billions of lightyears away will be light that depicts what the stars, and galaxies looked like billions of years ago. So, light from galaxies over 13.5 billion light years away, should show us what these portions of the universe looked like in this hypothetical past.

CMI-US 的 Bruce Lawrence 回复： 感谢您的来信。 你有一双敏锐的眼睛。 事实上，这些照片看起来并不特别引人注目，但正是这些照片让很多人认为它们很了不起。 它们被认为是非凡的，因为许多宇宙学家期望这些星系和恒星看起来像假设的原始恒星和星系。 相反，它们看起来更加成熟，更像我们在离我们不远的太空部分中观察到的恒星和星系。 CMI 之前曾撰写过有关詹姆斯·韦伯望远镜以及那些相信大爆炸的人期望看到的内容的文章。 那么，詹姆斯·韦伯太空望远镜（JWST）显示了什么？ 根据大爆炸，宇宙开始时要简单得多，经过数十亿年，现代恒星和现代星系慢慢形成。 他们创建了模型来预测这些早期星系和恒星的样子。 “韦伯将成为一台具有红外视觉的强大时间机器，它将回溯到 135 亿年前，看到第一批恒星和星系在早期宇宙的黑暗中形成。”1 大爆炸理论家相信，通过深入太空观察，他们可以揭示宇宙古老的过去。 这里的想法是，由于光以一定的速度传播，来自数十亿光年之外的恒星的光将描绘出数十亿年前恒星和星系的样子。 因此，来自 135 亿光年之外的星系的光应该向我们展示宇宙的这些部分在这个假设的过去是什么样子。

Because of this, they expect to see the ‘primitive’ galaxies and stars that would have existed in the early stages of the hypothetical big bang universe. This is where they hit a brick wall. Contrary to their predictions, we do not see these primordial structures. Instead, what they find are far more mature/modern looking stars and galaxies. This suggests (given their assumptions about the age of the universe) that even 13.5 billion years ago, stars and galaxies were already very developed and mature. Cosmic evolution requires billions of years of slow and gradual change to go from the early big bang conditions to what we have today, and what we observe from the telescope contradicts this.

Light from the most distant cosmic structures shows they are mature and well formed. It is almost as if they were created mature and did not slowly form over massive periods of time.2 This is consistent with God creating a complete, functional universe from the start, but does not fit with the idea of slow, gradual, cosmic evolution. When God made the creatures of the air and sea, he did not fill the oceans with eggs that gestated and hatched in the water. The animals were full grown, ready to feed and breed. God did not create Adam and Eve as embryos gestating in motherless wombs. The Sun and Moon were created and ready to serve their purpose from the very beginning. These images from the farthest corners of the universe are consistent with the work of our Creator.

正因为如此，他们期望看到在假设的大爆炸宇宙早期阶段就存在的“原始”星系和恒星。 这就是他们碰壁的地方。 与他们的预测相反，我们没有看到这些原始结构。 相反，他们发现的是更加成熟/现代的恒星和星系。 这表明（考虑到他们对宇宙年龄的假设）即使在 135 亿年前，恒星和星系就已经非常发达和成熟。 宇宙演化需要数十亿年的缓慢而渐进的变化，才能从早期的大爆炸条件发展到今天的状态，而我们从望远镜中观察到的情况与此相矛盾。 来自最遥远宇宙结构的光表明它们已经成熟并且结构良好。 就好像它们是被成熟地创造出来的，并不是在漫长的时间里慢慢形成的。2这与上帝从一开始就创造了一个完整的、功能性的宇宙是一致的，但不符合缓慢、渐进的宇宙进化的理念。 。 当上帝创造空中和海洋的生物时，他并没有将在水中孕育和孵化的卵充满海洋。 这些动物已经完全长大，可以喂养和繁殖了。 上帝创造的亚当和夏娃并不是在没有母亲的子宫里孕育的胚胎。 太阳和月亮从一开始就被创造出来并准备好服务于它们的目的。 这些来自宇宙最遥远角落的图像与我们的造物主的工作是一致的。

**Is this cause for celebration or caution?**

I would recommend a healthy mix of both; cosmologists have a habit of sweeping problems under the rug, by appealing to [fudge factors](https://creation.com/cosmology-is-not-even-astrophysics) such as dark matter, dark energy, and superluminal inflation. These fudge factors are used to wave away difficulties between what the Big Bang theory predicts, and what we actually observe. [Some secular scientists](https://creation.com/secular-scientists-blast-the-big-bang) take issue with this practice, but the average person won’t know those things are fudge factors.

A fudge factor in this context refers to an *ad hoc* explanation or mechanism that is invoked to prop up what would otherwise be a failed theory. Here is an example of some of the fudge factors that are needed to prop up the Big Bang. An excerpt from a previous article [explains](https://creation.com/dark-photons):

“First it was *dark matter*, then came *dark energy*, followed by *dark fluid*, *dark flow*, and *dark radiation*; and now a new entity is suggested for the dark sector of particle physics—*dark photons*. The dark sector is full of hypothetical entities designed to save the big bang story but it is really just a lot of cosmic storytelling.

Previously I have argued that dark matter is a sort of *‘god of the gaps’*, the ‘*unknown god*’ in astrophysics. It is an unknown invoked to explain the inexplicable, which, if you follow the chain of logic, is required to maintain a belief in the big bang paradigm. Its existence is only inferred from the application of known physics to certain observations in the universe …

*Dark matter* has never been observed in space or in any laboratory experiment.”

Since big bang theorists have previously either ignored the evidence or invented fudge factors to gloss over evidence that conflicts with the big bang, I expect them to do the same with this new discovery. The [unscientific nature](https://creation.com/cosmology-isnt-real-science) of cosmological models are such that even with a large amount of contrary data, the theory often goes largely unchallenged. This may be the straw that breaks the camel’s back, but I won’t hold my breath. This has already been happening as articles pop up defending the big bang. Instead of addressing the questions raised by the images, they simply change the subject.

这是值得庆祝还是值得警惕？ 我建议将两者健康地结合起来； 宇宙学家习惯于利用暗物质、暗能量和超光速膨胀等捏造因素来掩盖问题。 这些捏造的因素被用来消除大爆炸理论的预测与我们实际观察到的之间的困难。 一些世俗科学家对这种做法提出异议，但普通人不会知道这些都是捏造的因素。 在这种情况下，捏造因素是指一种临时的解释或机制，被用来支持否则就会失败的理论。 这是支撑大爆炸所需的一些捏造因素的例子。 上一篇文章的摘录解释道： “首先是暗物质，然后是暗能量，然后是暗流体、暗流和暗辐射； 现在，粒子物理学的暗领域提出了一个新的实体——暗光子。 黑暗区域充满了旨在拯救大爆炸故事的假设实体，但它实际上只是大量的宇宙故事讲述。 之前我曾说过，暗物质是一种“间隙之神”，是天体物理学中的“未知之神”。 它是一个用来解释无法解释的未知事物的未知数，如果你遵循逻辑链，就需要维持对大爆炸范式的信念。 它的存在只能通过将已知物理学应用于宇宙中的某些观测来推断...... 从未在太空或任何实验室实验中观察到暗物质。” 由于大爆炸理论家之前要么忽视证据，要么发明捏造因素来掩盖与大爆炸相冲突的证据，我希望他们对这一新发现也做同样的事情。 宇宙学模型的不科学本质是，即使有大量相反的数据，该理论通常在很大程度上也没有受到挑战。 这也许是压垮骆驼的最后一根稻草，但我不会屏住呼吸。 随着捍卫大爆炸的文章不断涌现，这种情况已经发生了。 他们没有解决图像提出的问题，而是简单地改变了主题。

Some have done this by pointing to the lack of acceptable alternatives, and the Cosmic Microwave Background radiation (which is a [problem](https://creation.com/secular-scientists-blast-the-big-bang) for the big bang)3, other secular scientists have tried to explain [why their big bang predictions fail](https://creation.com/secular-scientists-blast-the-big-bang):

Since big bang theorists have previously either ignored the evidence or invented fudge factors to gloss over contradictory evidence, I expect them to do the same with the new discovery.

“Without the hypothetical inflation field, the big bang does not predict the smooth, isotropic cosmic background radiation that is observed, because there would be no way for parts of the universe that are now more than a few degrees away in the sky to come to the same temperature and thus emit the same amount of microwave radiation. … Inflation requires a density 20 times larger than that implied by big bang nucleosynthesis, the theory’s explanation of the origin of the light elements …

In no other field of physics would this continual recourse to new hypothetical objects be accepted as a way of bridging the gap between theory and observation. It would, at the least, raise serious questions about the validity of the underlying theory.”

We also need to keep in mind what would count as an acceptable alternative in the eyes of big bang cosmologists.

“‘People need to be aware that there is a range of models that could explain the observations,’ Ellis argues. ‘For instance, I can construct you a spherically symmetrical universe with Earth at its center, and you cannot disprove it based on observations.’ Ellis has published a paper on this. ‘You can only exclude it on philosophical grounds. In my view there is absolutely nothing wrong in that. What I want to bring into the open is the fact that we are using philosophical criteria in choosing our models. A lot of cosmology tries to hide that.’”4

The big bang model is preferred and chosen based on philosophical bias. An alternative model could be proposed that explains the data far better, or even just as good, but it would be rejected due to philosophical preference. An alternative will only be accepted if the model conforms to the bias of the community, and it does a better job of explaining observations than the big bang does, that or the community will need to undergo a change in its philosophical bias.

Finally, this focus on acceptable alternatives is nonsensical, if a theory has a substantial conflict between prediction and observation it is illogical to continue promoting the theory as true, just because you don’t have a replacement narrative. One could simply admit “we don’t have a working theory anymore”.

**In Conclusion**

The photos obtained from the James Webb telescope reveal a universe that is contrary to the expectations of big bang theory, and this is cause for joy, but we need to temper our expectations. This is by no means the first time that observations have heavily contradicted the theory and it is likely that this issue will largely be ignored and covered up through fudge factors.

有些人通过指出缺乏可接受的替代品和宇宙微波背景辐射（这是大爆炸的一个问题）来做到这一点3，其他世俗科学家试图解释为什么他们的大爆炸预测失败： 由于大爆炸理论家之前要么忽略了证据，要么发明了捏造因素来掩盖矛盾的证据，我希望他们对新发现也能做同样的事情。 “如果没有假设的暴胀场，大爆炸就无法预测所观察到的平滑、各向同性的宇宙背景辐射，因为现在距离天空几度远的宇宙部分将无法到达 相同的温度，从而发射相同量的微波辐射。 ......暴胀需要的密度比大爆炸核合成所暗示的密度大20倍，这是该理论对轻元素起源的解释...... 在物理学的其他领域中，这种对新假设物体的不断求助不会被接受为弥合理论与观察之间差距的一种方式。 它至少会引发人们对基本理论有效性的严重质疑。” 我们还需要牢记在大爆炸宇宙学家眼中什么才是可接受的替代方案。 “‘人们需要意识到有一系列模型可以解释观察结果，’埃利斯认为。 “例如，我可以为你构建一个以地球为中心的球对称宇宙，你无法根据观察来反驳它。”埃利斯就此发表了一篇论文。 ‘你只能从哲学角度排除它。 在我看来，这绝对没有错。 我想公开的是我们在选择模型时使用哲学标准的事实。 许多宇宙学试图掩盖这一点。”4 大爆炸模型是基于哲学偏见的首选和选择。 可以提出一种替代模型来更好地解释数据，甚至同样好，但由于哲学偏好，它会被拒绝。 只有当模型符合社区的偏见，并且它比大爆炸能更好地解释观察结果时，替代方案才会被接受，否则社区将需要改变其哲学偏见。 最后，这种对可接受的替代方案的关注是荒谬的，如果一个理论在预测和观察之间存在实质性冲突，那么仅仅因为你没有替代叙述就继续将该理论推广为正确的理论是不合逻辑的。 人们可以简单地承认“我们不再有可行的理论”。 综上所述 从詹姆斯·韦伯望远镜获得的照片揭示了一个与大爆炸理论的预期相反的宇宙，这是值得高兴的，但我们需要调整我们的预期。 这绝不是第一次观察结果与理论严重矛盾，而且这个问题很可能在很大程度上被忽视，并通过捏造因素来掩盖。

**Did God use a big bang?**

**Trying to ‘fit God’ into a secular construct**

Rick L, U.S., wrote in response to the article [Multiverse Theory](https://creation.com/multiverse-theory):

123rf.com/Gennadiy Kravchenko ![A close-up of a hand holding a glass globe

Description automatically generated with medium confidence](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEASABIAAD/4REGRXhpZgAATU0AKgAAAAgAA4dpAAQAAAABAAAIPpycAAEAAACgAAAQXuocAAcAAAgMAAAAMgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAB6hwABwAACAwAAAhQAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABoAHQAdABwADoALwAvAHcAdwB3AC4AMQAyADMAcgBmAC4AYwBvAG0ALwBwAGgAbwB0AG8AXwA1ADYANAA3ADMANgAxAF8AZwBsAGEAcwBzAC0AZwBsAG8AYgBlAC0AbQBvAGQAZQBsAC0AbABhAHkAaQBuAGcALQBpAG4ALQBtAGEAbgAtAHMALQBoAGEAbgBkAHMALgBoAHQAbQBsAAAA/+EI3Wh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyIvPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+//4APENSRUFUT1I6IGdkLWpwZWcgdjEuMCAodXNpbmcgSUpHIEpQRUcgdjYyKSwgcXVhbGl0eSA9IDkwCgD/2wBDAAYEBQYFBAYGBQYHBwYIChAKCgkJChQODwwQFxQYGBcUFhYaHSUfGhsjHBYWICwgIyYnKSopGR8tMC0oMCUoKSj/2wBDAQcHBwoIChMKChMoGhYaKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCgoKCj/wAARCAGQAQsDASIAAhEBAxEB/8QAHAAAAgMBAQEBAAAAAAAAAAAABAUCAwYBAAcI/8QAOBAAAQQCAQMDAgUBCQABBQAAAQACAxEEITEFEkEiUWETcQYygZGhFAcjQlKxwdHh8GMkM2Ki8f/EABoBAAMBAQEBAAAAAAAAAAAAAAABAgMEBQb/xAAjEQACAgMAAwEAAwEBAAAAAAAAAQIRAyExBBJBURMUYSJx/9oADAMBAAIRAxEAPwDkj9aVYdZolScOR5XY2kjXK8c+rOFWNcRpdEZ8he+n5T6QWNNlXM5VDBRRULbO1LLiWcN+6lGT3Lkg1pTibpBotItaUZijuIQjRtF4pohOhpjBjQApEaNr0bhW1x2zpJoEwTIZYWX/ABNiiTDkFeFrZfKT9Uh+pG4H5RdBKNxPyp+K8Y4/WZW1QJsL6h/ZpHWHEa8BZX+0rpph6m2QNOzRW6/s8g7MGLXhdOSd40eZgxeuWR9Gw2+kI1ughsUegUimt8+Fgeqo6O6IVMvGwiA3SrljsKkRJC+RtmwhZmGtpmY9quSIG0NEISO05SFEUi58ffCH7aO1LQMHkj5IVAsHaZfTJGkPLCeQkSyMcgGir2CxbSgnWDRREJIANppkUEdprYUA7tNHgqbSSFMRd/HKoaX6eY1rm0V0xBp1wusjLTtS7jdJMuKIit2qjdolrQb0F3tH+X+FBpQOYgRvRV8cbWDjaIEXc5dlj7SFaRlJg5ZZoLzogG/KIazVqLhooYJAjWeugjI4+1oHlcgj9XcQigzYJSopIrEdkWrmR6UmizwrmNKBlLmK3HCt7L1SsZGQUMpMtj4U/hTjYA3jasbGkykkByA2bQWW0OaRXhM5W8oOZmikWto+P/2kdNErw4N82mn4Ih7MKMfFJv8AjDFEsRJHCD/DDexnaPdO9UcvrUzYYzaaEWBpDYx0i27TOn4eaNrz2+FZVLxojhUiJAjm74Xuz3V72i9qLuEENAc0Y8JdkR06wm8nlL8htlD2SDR2rfohw3yvNAA3ypNJ2kSwOfHBO+fCr7CwUUXI4d2+V5zWyN8a4Uv/AASKo2ntCJiQzbbbT4RMDgTXlVFlNFhogkqt0erCLawOGuVx8Z8cptFopiGiTyvEG1YAQFCj5BU0VsJY09wtemaS7SOEO6rarki7dlV/hlVgQ1oqTWd5rwFJ49WvKIhipgHnyk+lpFDWgHjSmeaCuMXwvBg0gZ1jNK+Nu9rrGitqxtA0hgjrW70FY1u9jak2qUteyXQdnWqzdKtvIV4AqyiikylzL5CFnbpXZWbDD6S4F/tazfXeuDEYLItxoD3Qo2TLNGHQf8Qw/UgdQspF0OCWF572ENtOHB08YfPI7uIsgHhLouoYTXubC6eUg0exr3i/00tFjRxz8ht2kaPHkYAAf9EZHMzRJFJLiTCVneGyM3VPaWn9ii2O8Uq/jQl5cxoJGP8AyuB/VSoDgoCNsf8AlAREYPLXmva0nA0XlX1E5ASFURpX7rYVUgrhTRrHIpcKH7tCzDaK+FRK3lJotoDdyvAGtLkgp2la003aRDQNKw8qkOcHUju3uBIQzmes6SaBaPV3j5XYrY6iu9wbS64h41o+ElopbCmSUQr45O475QERLdOBRkFHlOyqLi0fuqi3fKJIbW16h7BOhpjJpF2eUPkkbtTc+hYIQsrw4gXslNslKiMcdnuI0OEQwbXaHaPgKMZ9XwpKYQxoOiqZWhrtKxr90q5vzEpkpHWX4VoGwqmGhpEQj3QO6Ji9KY8WokhqhLM2Nhc4gAC0UNvVlpkbGC9xAA2s/wBY/EADXsgNNGi6/wCEs671p0hdHET28aWS6jlba10g0LcBvZ/hUkc08jekHZvVnOcXl5v3tZrP6k/IyO90jnFvBJ2h+pZzGt7WtLi73J3+gRfTOg52fD9Z4ixIydB8duI+3IH6p7M3X0a9D6jmdWnkgmyixjGWexoDjtaXFhixIRFA0NYN83z7/KV9F6Szpge4y/Vldru7Q3X2TMO3Z8K46RlJBAkP7K6OQoMOJO6Uw6irsn1GUUyKjkFghKY3nwUTG869rSYJDZsgI2vTOa2JzyC6hdD/AGQMcmkRHJrZ0paKWuFMU8cwtlgVYvlceOQpuZ2y0xlxPB7iP8J969kOyQF7mE+oGvZS0dOPLemD5Ao/Koa/YB4RWUw81pLpXUVk9GyD43CteVCagCh8aQl1FETflSTG46AJpe00oRzju2V7IYSgnAtNjhDEtD2GQSCirWtc023YSzBlBoE8JvC7uAA2EJ2aJplkc+qPKtEzaVDo/Ycrn9M72cnsTQZO9zdWvY0ZNucumMyOs/lCsc7sbQRf0r1Ol268L10dIf6m9qxju47TWyWqL2jze1F59S611C1TI7ZKGxpfoQCKV7H6S9riTQRcbSBtISSLHuNEkrN9e6kA0sDiG/6pl1fMEMJAO6WA6vll5dZ5VJGGWXxAmZmOlnawHtYTuvZLsKKbquaYoqHcS5zj/hF8oOXIP1JHWfSx3Hzr/dQ6US/IsEgeRapbdGTVI3fT+j4OE/uia2TIrcjyCR+nhMDrV7WUwsk4s4kAvRBF8grTwytmibI26cL+RauqMU7Ou5XgF0jm13xpNIKOtVgohVjlWNQFE2iuFax3uq2qbUWFF7HK5r6r2CGad6KsYfFpDBOo9Udi5IDe4OYB6Ttr2nz90EeqCbNDyz6YcAObv5R3UsJmU0PAAlb59/hJRAT6a2OFNhw1bT9XHBcB/wApbkw80iOmy3idjvzNH8KrLcKsKZI6cU70LWuLHo2J/e3e0C8260bigUCsfp0xJ/R7jtcnwW9muUczs7fChJtulSFKIsx8btf8WnOFGBRA4QvaGtv3RGPMGs0loIoPAA9le13pGkJG7uF2iGvFBVZpQTMxrIteyWPJcSm+TEXt50g2Y3qIcptsfEA9hJ0r2RkC0aIWDQCmGtAqlXwzSsXuLhqio13FFy0CdBCudR/VT9Llwta0N45RHcGxknwhGzCqJ2qs2ftxnUdq0Yt0jM/iHMLpHb1wsV1PJprtp11fIJe6zu1lM1/1JO3xe1VnMtuwbHPeMh7rrsr/APZqZ9HgIMjyNDQXMLAkOLJIW0x4Ab7mnDgey0vRemmMN/qA0WO7ssWR8pRexTYNj4Us7m9rD2k7ceK97WkijbFGxjfytaAP0CsoCq/RcK1bMlGj3uujhcHP2XvHymgJD7qbKVY4HuptJ0gCwcqxqrHwrGoY0WDxSkFEaUh5tTY6FmRJOMl1Oc0A9uvIv/tT+kGuAPtYXc+v6lg3oD9dlXTV3trnypol9Ow211jxtWZcYdGC1QYNEH2VpJOPocH9wm1aKg2mJpD2Poq6GazQQ3UnU6xpD4s29lc76d8XZoYXWAOUQNiil+HMLBKNa4OOk1spvQPkO7XUuxP0Puo5jdghUwGjZ8JNUKLHEMgaK91b3H2QWIxzj3EGkb2uStmqVj5wDhvwqI6DzaumNCkvMhDyDyCqQ2g2QtoVSqcBS4x4c2ivGQcJkJAeQ/kWgZX80icx3NJU+Q99FL6EuBcJJdtV9XcGxFo9lOEiwQqOp+oGzQA2rijmm6Rg+pMfJK8MF1e+K/fQCD6Rg4s+S90zjLHG0veRpoA8XyT+36o/rLnSBzG+ll3Q/wBfuqelRy/0cmPEwH6pBJA3rx9k5GCeg3ED3NlzskD6YFQw+NbH6BXdCZLNkyZEhJHBPu4/9FQc2Z7mxS20NHaG1XbYrhDxukgP929zPeidqU6EPsvJ+i4Na3ud53oK6F4lia8WL8fPslOO4yM7nEl17J3aOwpmh30jWz6fv7LZcM72FVS5rzwpVvxS8BsUix0eH3Uh8oPFzsfKzMnHgcXPx+3vdXpt16B99G0Y27+EXY6LW8C1YL18qto+F17CCHg7FBFg1SLh4sKwC+VWx180rm8Wgapg+bGHRBxv0nSGitztA1+6ZOaHNLXcEbQ7IfpuPsP9FLE19PNFUPddi/ORuirGNtysZGA+x9kxcZnOrRu73ABJRI+N9EFafq1CR2kgkNy8DlYzVM68ctB2JkWBdpziPLgk2M1rasBOcQjRA0pRumXTM7hwqoYwZQCi5T6bB37KvCb3SuJ96RIlLYyxo9a4RH0fhdhAYwEqX1wPIRRtYU55cUHI3ufY5RDmuaTZ5Q/q5PukmaTRbEy6BK9K36dm11v5LvaFyXkggFUZf+gedkN7T7pIZw6U0UbnQvcCSaShsZbLt3lTeyJsdY8npChnnuYL8hQx+0AbUuoOAgDx40VtE5p8Mb1FtOdaYfhwMZKC4gEtoHhLurOPe4Dwr+mOLoQQiTpmKVoddTlh7S2w6UcEbr9UoyIS5xLK9/0P/wDVfIwu3WwrIIJniNzY3URX7Hmz96STtgUwRmOOjV8qMnwUZlYz4WhxIIuteCgn/lO1omZNFr+oPgAaHMm1d0RXx8rO/i7rGXJ0x0MYbExzh3Flg1zXwLRGc9wic6MtG6t5of8AazHUHske50rpJj/laS1n8/8AAQ2ioJtjTonUcvF6E+XGxpXZEsn035byXaBJH3PqcPO/4d9C6xlQAR5zjLG46MjvWCfnmtpN+D+sjp+S+CeJoxJyBTBfaeL3sjfk/wClLVOk6A5jiAw9xJ7WNcDf28fwoTNWel6zkS5H0cNsLP8A5Hu4/fX8FMenOY5rw7LOVNy47DR8D4/hZl0cL5z/AE7XtiP5Q8gn9VpekY7YIe40CeU0yWq0M2DQVwlayg69+20PG/vdTndra9rRIdE2uwdzvHn+VTdiii1ovgfK5KPTdbVbZHNPNnz/ANL1k8+6VlNEmD1BXAKuOtkqxrgdJkMRdafUrgEgjNz7TrrFumfSVxwkusA2sJPZ0wWhnjtBIvhNcdrWgJPjBwdsJrj32i1KZvFaCJR6dL3T9yH55UHuPY73UcJ30wC790+sL2NpZajI1XhDifXF/oqy45Moay+0bcmscTGsAAFBOy02HywmtlBTegcptI3uBpASR9rj3e/7KTduyGM3vZtdkhAaSFZFTT8L07u5ukJmdNmf6kC2ws3kvc1+r5Wr6gzuab5WdzsfVhBnNFeJkHyUxZWRE5hPISaNhaUzwX9sjbKuL2c81aJ9f6K2fpwdAAJom3x+YVx91nOixinNPN2voGO7vjokWNcpN1LpMOO85UDH2SO5jON+fhaTVnNG1oA+hqyF1v1wwhrnAAaRYJeGtjaLqxq/HG1WQ7k/mB8+FKVFC1znNEgkeX9/P3/5QOVIWjtbr9LTnIiFkgaq0qyowTu07fCWjOZ7S4kucSflIsoDuNe602bDYI2k0+PvaVDiwLGaS7S0UDDI1klbOnff3/3+6VwY/adXae9LaOHfldo/Hz+iEirD8OFuiQncDTQslC4mORV6pNIYtCgUIKOsaeANq8ekED83v7LwAboHZ5KsYNJjSItarGt82utHKm0eFQmiQAA2P2UGO9bq4q1M8FC5D/pxON7OghukTVuhdOwOkcSOSqzEG0QBtFwsLxZUMlhaLAXO3ezqS0VR8gIyNxOgNISGtkoqE+3JUp2zaK0emk7WuHlVNl7ccAiyrsiMhnq8j2Q/TbmyWxkWG7P6K6+kNbHWBF9KLj1f7pg1/pCrb2tYLq1H6rEdNorQ9LnCQ1whMh2zfJ4Rj6+mT77QT2mRwcRQHCRp7HI2miCFBzdnaIYRsOIpD5BB48IBNguWwFvHhKJoRRJG01kk97pBTtDjYQZyQmmx/USAqm2xyavjtA5EZBJCOGDQzwZtscePyuTcNsb9lmMWYN9LuDpaTEd3QtJIJqtLeMrRy5I+rsy+PKf62Vvb2dspoewBTbqcAb/etA3o/wDKJ6ti4/8ASyzOYGyAWHAUb+ffaA6bmDKxJ45yAI2c+yKolP4LpD3McPLdj7e3+6V5I5RzpSD3A8Gwgs4truYPS7gex9v/AHhITaYnyxdpTM3ZTTI7j5QUlcEbVEplULfV8J70+IFoS7p2JNkv/uoyQNl3AA9yToBafp8MMIABE0gHIFNB+Pf+Ak0WmHYUBLAXGgOD7/b3RegKaKH/ALlchBdTnbKI+mHeNpJFooaNq1oUhHR0phiB2cAUjpvyVIRnzx5UXt8kqkS2clf2s2UmyskyyBo4CIzp+0FoO0sb+ez7rLJL4i8cfo8wmt+mL9lT1D8vaOSVPEkAisVwqZnd8mrJ8BQ+UdCRTHGQBaOxgxjS4kX4XosVzq7v2RjcdrG1SUUabA55wQQePsp9MiZCx8gHqfsa8KOSP8IregiImO7A1q0bIS2W93c71En4Vgdr8q7Bj0d2SjBjmuAkjRBLZzIe0nQ5XZJWhporO5/Uzg5ToZLaSO4eP2QrusNNAOBLtDai0htmkilD3muBx91Y6M1rztJenZbewFxtxN/dOHSekG91wEJGioEyWgNJHhAOcj8j1XygHRm9cJA0qON2OEHmAVrhHRtIFEcqvJhHaVRzsRh5DzXCcdLzfpu7HH0lKXN9ZpQjk7XfClScWZuPt00/UpGZMIjbfNn2SB8T4JA+MURo/N6o+4pMcDK9NO9QRpEcrSHRt7vm9rqhNSRx5Mbi7MbLMWFzSCB480qo8gOJjeCWP1ocH3H/ALYT/Nx+1xrHi/VpKVztyaPa76bf/jaG/wCipxM7FmTgTtc4TlkLR/ikdVj48kfYIasKF3pa/Kk93WxgP2Gz+4TMQ/Vj+lkXYvtkO+2/f4v9jv3Qr8F8b6cCHDlL1D2O475sgtbIQIxsMaKaPsBq/wCU+w4QAK8JfgQduyE7xmgVpDQ4vYVC3SIa3SqY32RDOEqNkzwAI3yphl12kG1wC+P1XaLtM/U8ISByRw3wAa+3KDzZxGDdWqeq9SZiMDI7fKdCvCBiZNlEOfe9qZSrQ4RcmDzOMj7INqp0Uha4gG/CdR4LQPUq8iBsbSWlZVfTp9WkI8XOkfkDEaD9ZxoD49/stdgYTYmN+pt5GygOh4bPquy3MH1HaB+FoAA0AgbRRcV9Oxsa3/CKVc1OBoDSs7LFkqiai7tafugtugRmP3ydxHHCPhi7RxtciZwEdDENIEjkMdH5RIZrlSEQAFL3agDPfjXpJ6n0mUYtDMiaXQk+48fY1/6l8z/DeFm5Eoly5KcDXYB+XfB+V9ol2SaWM6nA3B6s50bQGzevit+f5SUU+jmqDun4zMcd8hLna5TVs/c3ROx4SnFd3gXtOcRoNWFTaXCoq0DO7idh3vwqXOom2mj8J4GitN/hRfjtc3QAU3spp0Ju9paaBBS3NygwEEhP5cVhFEcrG/ivpecxolwj3w3/AHg/xNHv8j+UNmcosqZKJJCAdWrTGfblR6PADC0NBJ8kp3Dgl1Egko9dGSVivHcYzsJlD1BkA7pAC35VkuAOAAlHWumyz4rmRPLHeChOuA4/o9gzMPqBIjIDxyOV2Tp8cgoA38hKPwhinFoSbkBon3W8hEcjR3NBK3jPWznlgT4Yufpbt03SG/pCG9krSWj8p8j/AK+Fv3Y8RO6ooXLxcNrSToLRTTMJYJIxDMV0RsDub7hExkDm/wBkZN1TpOPkmJ09SeyGyerdPYCWkftSLTIUZItjkF0LJRDWPdsApG38RY0DiWAOvfCEyvxdKQRA1rB9km0ilGTRqzH2NJncGNHi+UBnZzQxzWOAYOKWPPW5pnd00hcSfJRWHK7KdZJoKJSo0hDexlh45yZvqPF7T+HGodoG0FgM7Wa5KaxaqztYrbtndCKSJOxw1vG/KTdSbTgwckgJ894LDtJMg9+azdhtkq2qCUmG4je1jW+BSPa7e60lrZOzgWVISlzjbjXwpSKtUG5EnpoEWVVE3W+ShjIOQpskN6SYJWMoGjVo+KgBQSqJzkdDKdAhFF+oYb7dBUnutXRyNPKs7Wndj90UwVAkoIHGlmPxbETgjIYPVC4OP2PP/vhax8rHA2lfUIGTwSRuoteCCPcHSRclaMx0fJ+qG0f1WrwqoALAdH7sPOlxpSS6N5b7WFuOnyF/bQSJg/g4a2x8KZaA3YC7FfZoLjw7ikir2BTtuyAgpxQIITct9G6QU7QWmx9tKinT0Z84rYJvqMbUbjseAU3xWgtBAFKEsYcwgqvBe9ryw8gppnO1TDJYbskEILIx9fCbn1N3/KHnjFWlwrqM4+8Wfvbxe0+w8sOia4EUdpbmw2DpLcad2NL9Mn0k6VRf6YzVbNU/KI2Sg82buhdvwgDlXooPPyiyJx7vCuiXPRiOoQvyPxF6fyt2Vb1OmN7W6oIjGlaZJpv8TjSHkZ9V57rSRi5CYMke7RKt/pXVZtNYsUdwoIxuH6bKpIltmYmYWihdrW9Gx/pYsd80CUlycYf1kTTwXC/0Wrw4bYCdDwlIvFth+LJ2gANJTGFx7dtNn9EJA2qaxuvdHMhLqsaSSSOq9HHyNDKIq/lKW7yn1yaATHLDY2H2pL8GMnvkogEmvt8JyejPrCSKbSm2NztAUF1jR3IuJvFKGzSMSpuOBXuiIoFeyPglEQx7Um6ikcii0EQyMAbCm1oC6460mkKXCt7RVg7VX1XDS9JJQQxl2VaMWwtziRpwr7KiVruSAQfZdcx7ao6XHPd21RtRo1bsx34kxvo9Vgy4+H+h/wCmwf8AVaLo7h2NIPhC9dxDlYbw0ESN9Tf02hui5P8AdgONOGj8EIoyTaZs8Z/doFHlrGx24gfdIcfKBbUZ+5RTcg2LBJ9ynVA229F08sY4s/oh5HRuFAcqckjy02W/sgpZBdHn3UlxbJ5EQ7QQQlktwzB41Zoo10hcz0uB+CEFkOJaWvH2VJfSZMcY1Pj7idcnYUZZI6Iu/P8A4pbgZLyKJAINcIp7nkElzyPHhU0TGQDmyMJsfzpIuoN7mkg75TzIBcSDd/8A5f8AKVZUR7XV+3gqCpK0LI8h3aS5x7uClfWc5zYXC9lEud2zObv7eyRfiJ4bF88LT4cTdOgjpfqx2k8lNIscHZCX9ELXMa08UnD6vtZf2QkNK9Ho4B3Cka2GmG/ZDxwSOAIv912QzRMLSfCaNHFC3+ndk9WY1jdM2VqcXEJ7RZ0KVPSMUMYHvaPqO2fj4T6FgBB9lDZeOFbO4mH2t2ArpGBrdDatDhQ+ENlzBoscBJNluxXnDud2jyVEU1oa37LxcXkuI8qcUZc+0SYRWy6CLSNjiqlyCMgC0UG0OErNooi1qub6QotG1aCE0XKqOB216U+lRe4DYQ802jtMhsqnkG9oB0w7io5U1E7St+UO87Qc05bNl4IKjq1ZI3agGm6PChnUiuRgcN1SzXVsF2NlCeK/puPqHstY6PSGy8cTQuYUJmU1YD01wcweybMaCFnMN5x53Qu5BWgwpO9u1TeiUqLPpuN+yokgu9JmKA4CpkFk0pKTE0sBaSW2FWQ5zSHH905dECLKFkgA4CaY2rEbA6DJ3YBTyEh7LNG0LkRBzacN+FHFLmu7Squ0Qo0XzwtcDraWZMBF9uxfBTzuFITIYHWQP4SL6Ynq8JjmbMARuish+KZD9MUPP+6+ldSxRJE5pFhfMfxQDBmxQyA/mB+6pPRy5I1Kx50DGP8ATsLvzGv0WlxYBwB+qTfh890LdapaeBvc0bGk7+GmOH1kmxBgACEyWB8zG0ObR8x7IiKH7ITD/vHueRrgIboctukMcWPgAI1rdgk8IWN/aK4V8UjKu9qOmi0i9pa0WdpZmyfUf2t8nf2RU8oA0lckg7nOsWeEMm9ljasNCOx2gVpK4H2+ymULxQUpmq4MI3AClO0PG75VzapMtMsBUS8KJd4VT3VspolsnI/Xwl+TN22pyza5SfqOSGtJtNmc5UinOygASTwszP1NolcLHKH631YMa4Bwv7rGS5r3SOcHHZW2HC57R5Hk+UoOj9OubfK81g8qzQVTz7Fcx7i2ef7BVlvK6Sud2kEtUZzr0Jie2dgqjtFdLyrjBB8IvqEbZoHNNbWYwZjjZLoHeDr7IIS2bWKQvCsYBaAw5raACj2uAAPlBTVcJP8AYBVPGla5wItDvkGwSigjsoe2zSGkjLT3N5CIc4A6O1W5wIIKNlOOjsMoP5htSkcCNDSFfQNhd+pbTvSaMkqZXkMsHyP9FgP7QujnJwm5cI/vcY95+Wef+Vvnurg2EBmsbLG9rgCCCOEBJfTJfhch2LH717raYbAGgEccLHdAhGHmz4p/wOPb9jx/C2cbmtjBsXS0iEeAnU5/psIP2VWI4RwtuhraH6zJbm17rmO17wAbtKX4JLeg4yl2mqxofVlxC9FGGtGtqUju1qSRT2CZGRKHdoNhCyPN7V8po2eUull9amTIUaGWORQR0LuNpVjSaG0bHIAbtJGqehrG7hENcKSuKdWnIHuqLTVB3cFRM8bQ/wDUAeUHlZjWg7CaMpzSPZk4aDaxv4h6oI2uAciur9UDWuo6+6wXVMt2RI7Zq1vhxPIzy/L8pQQLmZLsiUkk1ap7QpMZ7q0N0vVjBQVI+dyZJZJWz9OB4I2q3uraGdM1p5UXZBIIAXg0feJVwIuyvFwA2Qg+953tTFu5RSQNNnJnAgrL9ehMbxPHy3Z+Vq3Qgt8pX1TEMkLmgaITq0ZSQH0fOEjGkFaCKbuAK+d40knT88xSX2E6WvxcrujBB5CkcZXocOnHvtVG3GxwhYj3GyUVHxpUVFNsiYyVExH5RrGgrrowlZfqLZIneEK/ujPBpOewHlUzwhwIpCZMsYodIKNAhDSSiiD5Rs0Pa7QQc0YINhNoza/TN9W/+mz4cpnDvQ7/AFH+4TzFyRJCHWLSrrMBMD28jlJ+ldSc8thb+cGiFUX+mVtaNHN/fZLQNgb/AFTTFjAAJCH6filrO9/5nco9rKQ3s0jF9JvoNQMz+40PCvyZA1pCBL+Um0kFOyGQdUElzJDG6ynfaXXaTdZhPaSAoqxSdHMfMoDaMbma5Cxj8t0EhBPCsb1QUPV/Kz9q0ybZsm5u+V12eByf5WPHVBz3fyqZurezk/dEub4a+XqQAO0qzeplwIB/lZw50kvBNKnJnc0btaY05ukcmfL6q2d6nlukNA6SoizZVjnFxs+VwDa9zDjWONHzWfK8srONYrO1daFOlo2Yo+7RHvO72i447AS/HemsDgWrwWffRbZZHGNWFZ9NvsvClY2iFLRqQ7RwqZow4UrnGioE8oQOOjH/AIk6eHNL2jYQnRsrvYGOO26K1HVIxJE4EeFhu52F1Ig6a4pM5p6ZsIZNBHwO4SXGlDgKPITOB/ymdGN6GcR4VruENC4Vsq4vFchIt7IHRUJDr5Uu8EqL98IG+UCSi0BkNrhNjCXBB5UBqwE0zKS/DN9T/wDtkHekg/DmA1nU55nHTjY+CtTm45kjcBys/wBN7sXLeyT3tDMatmyZXYKXnFCwzdzBXsrfqDt2nZ0VSBssm/hDtFleyZgXUuQnucFLMVthccelRmYv1Gmwj4R6QpSNsEUqXByifOOv9KNucwb+Fj58fIieaul9kzcMSA2As/mdHa5x9I/ZKUFIybo+cxtnJANo/HxHu261pn9JDT+X+FB+OIgSQlHGkc2SYrbA2JlnwEtzJA5+kZ1LJABa0pR3FziSvQ8XFT9jxvNzKvUtapgKtquavQs8qiTQu0utU6HsiwPsEEuhSb4sg7QsthZHe0EeU8wZLpeEfb4pWhu19q6N+kICKCsY7aR1rgVQPyoSaC6x37Lso7k0iJSaAMhvc0rFfiTHIeHgbC3UzD28LPdZx/qRO96SaMZ7Qs6Pk98LQeRop7jyA1tYTHyjh5ZjdoErS4eaHAEHR+Uk/hMJ0aWOT0jan9X5SuHIsUCiond1JtHSpL6GNdatah4/uiWDhJoakWsA8qvIjDmnSsbV7XXkUQhDEGVH2ErJ9dAimErdG1t81gIJWO/EkRMDiPCHwymqdkun5gc0b/lFy5QAO1hsHqBiJaTtppHSdTDm8/yhPQnLQ/En1H3aOxhsLOYGX3UbT3FmBraKJi9juHhW690CyYUKKs+v8po0bRc8CjwhZYmuvhclmHuhJsrtHKuzCbVA+XE1t1SzHWpRGx1VabdRzw1rt+PdYzq+b9V5oq8UXOR5vk5lCIryHmSQmzyotHsuj3U2je16yioqkfOSk5ytnWhWC14DSkAgRNql/wC5UQuoA13QM/6kLQT491rsCfhfJOgZ/wBGQNJ1wvofS8xrg0g/yvIzY3CR9P4edTibGKS28q+MpTjZAc1HRSb0s6PVjK0MWkUph3yg2yGuVJshQU1YTJRaUq6hGC0j4RjpNJfmP0dp0ZNHzb8WwuheZGXd2l3RutuFNkJ1paT8Tx/VidawENR5TmHQ4UKNyOXLL0Vn1Hpme2YAghP8eQEBfNekZJheBflbPp+aHNbsWraroYs6kjSQu2imv0lUU7SBtEfWHuk0dkZJh/1FwyIITBSM3ykbXo7kEUs91eH6kbhXIKbzTWCluW4OafsijKbs+Rdd7sHPdyGuKBOfrlPPx5DbXPbyDawTcgnRUqL+GCmq2bzo+eCKtafEzR2ja+WdNy3tkAbZWlxuoloAcSChWif5FfTeszvlSOf8rFjqg/zKL+rCtO/lDlQ3kNhL1EVXcluX1MNabcP3WYl6pY/NpKM7qhcCA7+VeOLyOkcmfMoRtjjqXVC9xAP8pT9QvcSUtbMXuslFxO4XsYsKxo+cz53kkFjhTaq2HStC1MCY4UgVxvCkApGiYpdXAFJDASNeY3hwO1qPw/1aiGucspIoQ5DoZQQVOfCsiOjxfIeKVH2rp2V3htHkJ3jyEjlfOPwz1QSsaC7f3W4w8gObyvIlFxdM+owZlJWO45PdWhw5CAik1aIY8JM607Ra96Ay3aO0TI8e6X5T9HaETIRdWb3scPhfOOsRGHJ7gPK+j9QNgrC/iJuyQNpSdcObIrtHsKcuY1wP3TvB6gYyBay3S3+iimAcQbBXR6+8Tx/Z4p0bjD6p3AW7f3TJmcCOV89hynM3aNi6oQNlc8k4nqYM3sjdszR7/wAqRzBXKxkfVR/mVo6oCOQp9rOtZDUSZd3tBZOUA07SF3Ux/mQGZ1QdpAP8otGU8vwE/E0gnD2nysxD0WJ/qN2UyyZzPIQPdXR01opa4o2zzvJyuK0U43T4YB6Wi16eAG6CJtRftdHrE4f5JXdibIikafS7SEdJI3klOMga4SvJbzpNYIsb8qaA5slwB2UCZHOfu1dONlCPNFdmKCjw4s2WU+h0DuEfC5KYHpjA7hbs5RlEdBEsQcLuEXGpYy9qsa3SixWAJMZ4BdUqXEhmemPKBndztFTu90vnctjOxn0PqRxsgAu1919N6N1VszGkOHhfEHyFrgRyFovw71t0Tg1zj+64PKwX/wBI9bwfKr/ln3LHywWjaIGSPdYfp3VmvY2nfymreoAt0f5XnP8A09/HmTRozk65Qs81hJj1AX+ZUS9QbR9SSaKlk0XZ8o7TtY3rbu602zs8EHaz2VIZn0DaT26MJzSVsr6e3tCPtUQt7W0FZZXZBVE8bJL2lZIlDy34tW2uFEoKQ4ZXDgL3yDglWMll8kqwtC9QWX8Cs3/uS4Qe6UjTjaoMcr3epxRJI+F601hiQ/KmyEUYZ91dar7l7uWqikqMJScnbLbXCVX3crhcmiSqc6KWZFbR8ztFL8g6W0TOQtyPKXy8o+c8pfKbK6Io5pkonbCY47+NpU120Zju4WtGQ6gdwj4TwlGO5MoXKGNDCOqCuCFidpXhyBli9aiCu2kOzK5DksnfsozJdylszuVqZlEhNldx3Frw4cqt6lENhKStFRbTtGq6T1J7AGklaCLqZDAQ5YnEvVJxA40Ba87N46ltHqYPKcVTHrupu9yq3Z8jhQtBxNB5RDWtC5P67TOz+4Qc+WQ+okBWRxgbUhQXbWscSic+TPKeid6XCVDuC93D9FoYEiVwlRtcJKaQErXC7wokrhKKA7ZXrUCVy0wJ2uWoFy4XJUBZ3KL3KHcq3u1ymkJsjI75QOQ5XyO5Qc7lrFGcmBZB5QEh2ip3coJ7l0xRzTZ4E2ioXIJp2iYTsLRmKY1x3cJhC7QSvHPCYwnYUNFDKF3G0S0oKI8Iph4SKLgV2/hQC6gDFzu2UFKUVMUHKdlaJEfSlx2rIhvSqKvh5CGtAnsY42qTSA6CV49plj+FjKNnRCQxiKIDvlCRHSvB0ueUTeLLO75Xi5V9wXu4LNouyzuXL+VAOXu4IAs7lzuUAV60ASJUb+Vy1wlAHS5RJ+VElRLkgJlyiXKBcol2+UAWdyre7S4Xeyre7SaQPhCV2kFMeUTKdFBSnlbwRjJgc5QT+UXMg5eV0xWjmkzzOUTChWFFQqzNDDHKYweEtx+QmEChlDCEotiDiRbPCkouapUosVlJAYWbygpfKNm8oOUbWyRkymldDyFTW1dFynQIYwJjAdBLICj4SolE1ixjGdK0FDRO4V4KxlE3jI6T+y5ZXCVAn2XPKJrFlocvWqQ5dDlnRZba93Kq120DLCVwlRtctFAdJUCV4mlAlAHiVEke68TpQtAiVqLnKJdyoFypCZCVyDkKIkOkLIVvBmUkCzISStoqbyhH8kLoizmkjjNFFQoRvKJiKoihhBymUBSyBMYCpY0MIiiozoIKE8IuMqSgllWrP1VLSrLSoD//2Q==)

I would summarize by saying it takes more faith to believe in Multiverse theory than it does to believe in God. Ockham’s Razor as you reference.

I am not as emotive about it. I welcome the chance to ponder the universe and try to explain the physical laws we see. Science is my friend. I don’t see it as a snub of God. I’m sure He can take it.

I would have to agree that this theory is philosophical and not scientific. It can never be tested or proven to be true or false. I think there may be some merit to the expansion theory. I like it.

I am willing to entertain the Big Bang Theory. I don’t think it threatens God’s hand in creation. Science may eventually explain how everything was created all the way back to a singularity. That’s great, it just explains God’s method. The Big Bang Theory still won’t explain why the singularity was there in the first place or what preceded it. So, God will always be the final answer.

上帝使用了大爆炸吗？

试图将上帝“融入”世俗结构中

美国的 Rick L 在回应《多元宇宙理论》一文时写道： 123rf.com/根纳迪·克拉夫琴科

我总结说，相信多元宇宙理论比相信上帝需要更多的信心。 正如您所参考的奥卡姆剃刀。 我对此没有那么情绪化。 我很高兴有机会思考宇宙并尝试解释我们所看到的物理定律。 科学是我的朋友。 我不认为这是上帝的冷落。 我确信他能接受。 我不得不同意这个理论是哲学的而不是科学的。 它永远无法被测试或证明是真是假。 我认为扩张理论可能有一些优点。 我喜欢。 我愿意接受生活大爆炸理论。 我不认为这会威胁到上帝的创造之手。 科学最终可能会解释万物是如何被创造出来的，直到回到奇点。 太好了，它正好解释了神的方法。 大爆炸理论仍然无法解释为什么奇点首先存在或者它之前发生了什么。 所以，上帝永远是最终的答案。

[Gary Bates](https://creation.com/gary-bates), the author of the aforementioned article, responds.

Dear Rick,

Thanks for your email. However, may I gently suggest that (per our feedback rules) that before you contacted a biblical (young-earth) creationist site, with your views on how God may have used something like the big bang, that it would have been helpful to peruse our site. For example, simply typing ‘big bang’ into the search engine, reveals a plethora of articles on the subject including a very good summary of the problems with the big bang called [The mind of God and the ‘big bang’.](https://creation.com/the-mind-of-god-and-the-big-bang) However, I have responded in a manner that will allow you to access more information via the links in this article. I hope, in the interests of being fully informed, that you will take the time to read them. I mean this with the greatest respect, of course. We aim to be a service to Christians and specialize as an information ministry in this regard. This site contains *lots* of information.

The big bang wholly fails on two scores.

上述文章的作者加里·贝茨 (Gary Bates) 做出了回应。

亲爱的瑞克， 谢谢你的电邮。 然而，我可以温和地建议（根据我们的反馈规则），在您联系圣经（年轻地球）神创论网站之前，以及您对上帝如何使用大爆炸之类的东西的看法，仔细阅读会有所帮助 我们的网站。 例如，只需在搜索引擎中输入“大爆炸”，就会显示大量有关该主题的文章，其中包括对大爆炸问题的很好的总结，称为上帝的思想和“大爆炸”。 不过，我的回复方式允许您通过本文中的链接访问更多信息。 为了充分了解情况，我希望您能花时间阅读它们。 当然，我是怀着最大的敬意来表达这一点的。 我们的目标是为基督徒提供服务，并专门作为这方面的信息事工。 该网站包含大量信息。 大爆炸在两个方面完全失败了。

**1. It fails theologically.**

The order of creation completely contradicts the order of creation as specified in Genesis chapter one. See [Chronological order in Genesis 1: Big bang beginnings and days before the sun](https://creation.com/chronology-genesis-1). For example: Contrast the differences below from our article [Two worldviews in conflict: Evolution is absolutely opposed to the Bible.](https://creation.com/two-worldviews-in-conflict)

Compare the following:

|  |  |
| --- | --- |
| **The Big Bang order of appearance (also for ‘progressive creation’)** | **The order of appearance in** [**Genesis 1**](https://biblia.com/bible/esv/Gen%201) |
| 1. Matter always existed or just appeared | 1. God created matter |
| 2. Sun/stars existed before Earth | 2. Earth created before sun/stars |
| 3. Sun is Earth’s first light | 3. Light created before sun |
| 4. First life = marine organisms | 4. First life = land plants |
| 5. Reptiles pre-date birds | 5. Birds pre-date land reptiles |
| 6. Land mammals predate whales | 6. Whales pre-date land mammals |
| 7. Disease/death precede man | 7. Disease/death result from man’s sin |

Moreover, the big bang is a secular hypothesis that seeks to explain the universe without God (despite the views of those Christians who want to accept it). As such, it has its place in the General Theory of Evolution (GTE) which is more than just the molecules to man idea. It has to explain where a universe came from in the first place. See [Physicists: The universe had a beginning](https://creation.com/universe-had-a-beginning). In his classic book, [*Refuting Compromise*](https://creation.com/store_redirect.php?sku=10-2-575), [Jonathan Sarfati](https://creation.com/dr-jonathan-sarfati) wrote in chapter five, (remember that the big bang puts stars before day four when Genesis one says they were created):

The big bang of today is nothing like the big bang of, say, 20 years ago. In fact, it would be fair to say it is constantly being revised and changed. This illustrates the philosophical nature of the theory and that it is not the great ‘scientific fact’ that many believe it is.

“Some assert that what really happened on this fourth ‘day’ was that the sun and other heavenly bodies ‘appeared’ when a dense cloud layer dissipated after millions of years. This is not only fanciful science but bad exegesis of Hebrew. The word ‘asah means ‘make’ throughout [Genesis 1](https://biblia.com/bible/esv/Gen%201), and is sometimes used interchangeably with ‘create’ (bara’)—e.g. in [Genesis 1:26–27](https://biblia.com/bible/esv/Gen%201.26%E2%80%9327). It is pure desperation to apply a different meaning to the same word in the same grammatical construction in the same passage, just to fit in with atheistic evolutionary ideas like the big bang. If God had meant ‘appeared’, then He presumably would have used the Hebrew word for appear (ra’ah), as He did when He said that the dry land ‘appeared’ as the waters gathered in one place on Day 3 ([Genesis 1:9](https://biblia.com/bible/esv/Gen%201.9)). We have checked over 20 major translations, and all clearly teach that the sun, moon and stars were made on the fourth day.

I thoroughly recommend this book as it is very thorough in its discussions on the big bang, and much more.

1. 它在神学上是失败的。

创造的顺序与创世记第一章所规定的创造顺序完全矛盾。 请参阅创世纪 1 中的时间顺序：大爆炸的开始和太阳出现之前的日子。 例如：对比我们文章《两种冲突的世界观：进化论绝对反对圣经》中的差异。 比较以下内容： 大爆炸出现顺序 （也用于“渐进创造”）创世记 1 章中出现的顺序 1. 物质一直存在或刚刚出现 1. 上帝创造了物质 2. 太阳/恒星在地球之前就已存在 2. 地球在太阳/恒星之前被创造 3. 太阳是地球上最早的光 3. 在太阳之前产生的光 4. 第一个生命 = 海洋生物 4. 第一个生命 = 陆地植物 5. 爬行动物早于鸟类诞生 5. 鸟类早于陆地爬行动物诞生 6. 陆地哺乳动物早于鲸鱼 6. 鲸鱼早于陆地哺乳动物 7. 疾病/死亡先于人类 7. 疾病/死亡源于人类的罪 此外，大爆炸是一种世俗假说，旨在解释没有上帝的宇宙（尽管那些想要接受它的基督徒的观点）。 因此，它在进化论（GTE）中占有一席之地，而进化论不仅仅是分子到人的想法。 它必须首先解释宇宙从何而来。 参见物理学家：宇宙有一个开始。 乔纳森·萨法蒂（Jonathan Sarfati）在他的经典著作《驳斥妥协》中在第五章中写道（请记住，大爆炸将恒星放在第四天之前，而《创世记》第一章说恒星是被创造出来的）： 今天的大爆炸与 20 年前的大爆炸完全不同。 事实上，可以说它在不断地修改和改变。 这说明了该理论的哲学本质，它并不是许多人认为的伟大的“科学事实”。 “有人断言，第四‘天’真正发生的事情是，数百万年后，当厚厚的云层消散时，太阳和其他天体‘出现’了。 这不仅是异想天开的科学，而且是对希伯来语的糟糕解释。 在创世记第 1 章中，“asah”这个词的意思是“创造”，有时与“创造”（bara）互换使用——例如 创世记 1 章 26-27 节。 在同一篇文章的相同语法结构中对同一个词应用不同的含义纯粹是绝望，只是为了适应像大爆炸这样的无神论进化论思想。 如果上帝的意思是“出现”，那么他大概会使用希伯来语单词“出现”（ra'ah），正如他所说的，当水在第三天聚集在一处时，旱地“出现”（创世记） 1:9）。 我们查阅了20多个主要译本，都明确教导太阳、月亮和星星是在第四天创造的。 我强烈推荐这本书，因为它对大爆炸等问题的讨论非常彻底。

**2. It fails scientifically.**

The big bang of today is nothing like the big bang of, say, 20 years ago. In fact, it would be fair to say it is constantly being revised and changed. This illustrates the philosophical nature of the theory and that it is not the great ‘scientific fact’ that many believe it is. There have been many attempts to salvage the big bang with so called ‘fudge factors’, including the completely ridiculous [Multiverse Theory](https://creation.com/multiverse-theory), along with [String Theory](https://creation.com/is-string-the-next-big-thing), [and Dark Matter/Dark Energy](https://creation.com/has-dark-matter-really-been-proven), and so on.

If one purports to be a Christian, and thus, follower of Christ, implicit in that is to believe what Christ (and His apostles) believed.

Are you also aware that hundreds of secular cosmologists are also petitioning to have the idea of the big bang removed from evolutionary cosmology? See [Secular scientists blast the big bang](https://creation.com/secular-scientists-blast-the-big-bang). Also, that there have been two international (secular) conferences called ‘Crisis in Cosmology’ whose thrust was to encourage fellow scientists to abandon the big bang and come up with another model. University physicist and CMI associate, [Dr John Hartnett](https://creation.com/dr-john-hartnett), attended the second one. [His report is here.](https://creation.com/crisis-in-cosmology-continues-with-conference-of-big-bang-dissidents)

It therefore seems ironic that Christians would acquiesce to the ever-changing alleged ‘science’ of the big bang. If one purports to be a Christian, and thus, follower of Christ, implicit in that is to believe what Christ (and His apostles) believed. [There are over 100 references to Genesis in the New Testament.](https://creation.com/genesis-new-testament) So Jesus and the apostles clearly understood Genesis as a historical document without the need for the application of ‘modern’ science to help us decipher its ‘hidden meanings’. If one does not find the words ‘big bang’ or ‘billions/millions of years’ in Scripture, then it reveals (and perhaps most don’t realise this) that one’s authority is *not* Scripture. It is the secular interpretation of the universe (i.e. secular science) that becomes one’s starting point. That wrong ‘authority’ is then being applied or imposed on the biblical texts.

I pray that all this will be helpful to you. Of course one could argue that just because the terms ‘big bang’ and ‘millions of years’ are absent from Scripture, it doesn’t mean that they are not valid. However, their absence is only one clue we have that they are not biblical. As I showed earlier the chronology of the big bang contradicts Scripture. This is something we can strongly infer from Scripture rather than inferring into it.

1. 它在科学上是失败的。

今天的大爆炸与 20 年前的大爆炸完全不同。 事实上，可以说它在不断地修改和改变。 这说明了该理论的哲学本质，它并不是许多人认为的伟大的“科学事实”。 人们曾多次尝试用所谓的“捏造因素”来挽救大爆炸，包括完全荒谬的多元宇宙理论、弦理论、暗物质/暗能量等等。 如果一个人自称是一名基督徒，因此是基督的追随者，那么就隐含着相信基督（和他的使徒）所相信的。 您是否也意识到数百名世俗宇宙学家也在请愿，要求将大爆炸的概念从进化宇宙学中删除？ 看看世俗科学家爆炸大爆炸。 此外，还有两次名为“宇宙学危机”的国际（世俗）会议，其目的是鼓励科学家同行放弃大爆炸并提出另一种模型。 大学物理学家兼 CMI 助理 John Hartnett 博士参加了第二场活动。 他的报告在这里。 因此，基督徒默许不断变化的所谓大爆炸“科学”，这似乎具有讽刺意味。 如果一个人自称是一名基督徒，因此是基督的追随者，那么就隐含着相信基督（和他的使徒）所相信的。 新约中有超过 100 处提到创世记。 因此，耶稣和使徒们清楚地将创世记理解为历史文献，而不需要应用“现代”科学来帮助我们破译它的“隐藏含义”。 如果人们在圣经中找不到“大爆炸”或“数十亿/数百万年”这样的词，那么它就揭示了（也许大多数人没有意识到这一点）一个人的权威不是圣经。 对宇宙的世俗解释（即世俗科学）成为一个人的起点。 然后，错误的“权威”被应用或强加于圣经文本。 我祈祷这一切对您有所帮助。 当然，有人可能会说，仅仅因为圣经中没有“大爆炸”和“数百万年”这两个术语，并不意味着它们无效。 然而，它们的缺席只是我们所知道的一条线索，表明它们不符合圣经。 正如我之前所表明的，大爆炸的年表与圣经相矛盾。 这是我们可以从圣经中强烈推断出来的，而不是推论出来的。

**Multiverses: No help for evolution**

by [Jake Hebert](https://creation.com/jake-hebert)

Credit: 123rf.com / Vadim Sadovski

Creation scientists have long pointed out the enormous difficulties with ‘goo-to-you’ evolution, and even evolutionists have acknowledged these problems.1 Furthermore, the fundamental constants of the universe are finely tuned to permit life. Yet many evolutionists claim, despite these difficulties, that a multiverse can explain our existence without the need for a Creator.2

These evolutionists claim that our universe is *not* the only universe. They argue that it is just one of infinitely many universes, each having possibly different physical constants (and perhaps even different laws of physics). This multiverse, they say, removes the need for a supernatural Creator: if there really is an infinite number of universes, it is inevitable (so the argument goes) that *some* of these universes would have properties that permit life to exist. Supposedly, we ‘got lucky’ and just happen to live in one of these life-permitting universes.3

So, can a multiverse *really* explain our existence without God?

Supposedly, we ‘got lucky’ and just happen to live in one of these life-permitting universes.

**The origin of the concept**

The idea of a multiverse is a consequence of *inflation theory*.4 Within the big bang model, inflation is a dramatic increase in the expansion rate of the early universe, faster even than light. Inflation was proposed to solve a handful of serious problems in the original big bang model.5

Theorists at first thought that inflation stopped everywhere at the same time, very shortly after the big bang itself. However, they later concluded that different regions of space would stop inflating at different times. This would result in ‘islands’ of non-inflating space (still expanding but at a slower rate) surrounded by enormous amounts of still-inflating space, which would forever ‘cut off’ these ‘islands’ from one another. These ‘islands’ would become filled with radiation and matter and become, in effect, their own universes!

Theorists also became convinced that, once inflation started, it would never stop. This means that inflation would ultimately produce an infinite number of universes. In this view, the alleged big bang 13.8 billion years ago is only the beginning of *our* universe, not the beginning of the multiverse itself. Inflation is supposedly still occurring in other regions of space, with other universes even now being created.6

But a multiverse doesn’t really explain our existence.

**Some of the issues**

First, there is no evidence whatsoever that other universes exist, even though the idea is often popularized in science fiction television shows and movies.

Second, the multiverse idea is unscientific: because these ‘island’ universes (even if they existed) would forever be isolated from one another, it is difficult to see how their existence could ever be confirmed or denied. Since the idea of a multiverse cannot be falsified (shown to be false), it is arguably not a truly scientific hypothesis.7

Third, there is no direct evidence for inflation itself: recent claims for ‘smoking gun’ evidence for inflation were quickly retracted.8 Rather, the main ‘evidence’ for inflation is based upon circular reasoning—the fact that the big bang doesn’t work without inflation is counted as evidence for inflation!9 Moreover, modern inflation theory has become increasingly bizarre, which has led some theorists to criticize and abandon it. One of these critics is Massachusetts Institute of Technology cosmologist Max Tegmark, who says, “Inflation has destroyed itself. It logically self-destructed.”10 Even Paul Steinhardt, a leading inflation theorist, has become a critic of the theory.11

**No rabbit in this hat**

Most important, although the multiverse of inflation theory may make the ‘goo-to-you’ story *seem* more believable, this is simply an illusion. As we saw, evolutionists claim it is inevitable that some universes in the multiverse would have laws of physics and chemistry that permit life to exist, and we just happen to live in one of those. But in order for their argument to come anywhere near to explaining our existence without a Creator, it is not enough for these laws to *permit* life to exist. Clearly they *do* permit this, or we wouldn’t be here; but this is also true in a biblical creation scenario. In order for this argument to favour evolution, these physical laws must *also* permit the formation of life from non-life, also known as *chemical evolution* or *abiogenesis*. But *do* the laws of physics and chemistry in our universe permit this?

Moreover, modern inflation theory has become increasingly bizarre, which has led some theorists to criticize and abandon it.

Apparently not. Evolutionists still cannot explain the origin of life, despite investing enormous amounts of time and money on the problem. If we really do live in a universe whose laws of physics and chemistry permit chemical evolution, why has it never been observed?12 And why are evolutionist researchers still unable to convincingly explain how life could have ‘naturally’ appeared?

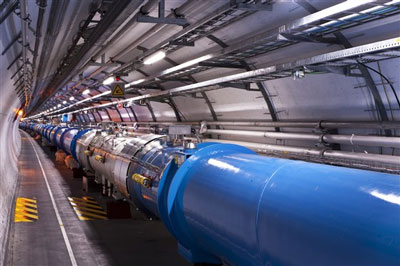
Could it be that perhaps the laws of physics and chemistry in our universe simply *don’t* permit abiogenesis? Everything we know about physics and chemistry in *this* universe indicates that life cannot come from non-life. Famous evolutionist Paul Davies has often pointed out that life is all about information (software)—programmed machinery. And, he says, “There is no known law of physics able to create information from nothing.”13

Thus, even if other universes *did* exist, and even if the laws of physics and chemistry in *every single one* of these other supposed universes *did* permit abiogenesis, this would do *nothing* to explain the existence of life in *this* universe. Do evolutionists really think that the enormous difficulties in ‘goo-to-you’ evolution stories will vanish simply because they claim that other universes exist?

Thus the multiverse idea, while it may superficially make evolution seem more plausible, actually gains the skeptics nothing in their attempt to explain their existence apart from their Creator.

**SUSY is not the solution to the dark matter crisis**

by [John Hartnett](https://creation.com/dr-john-hartnett)

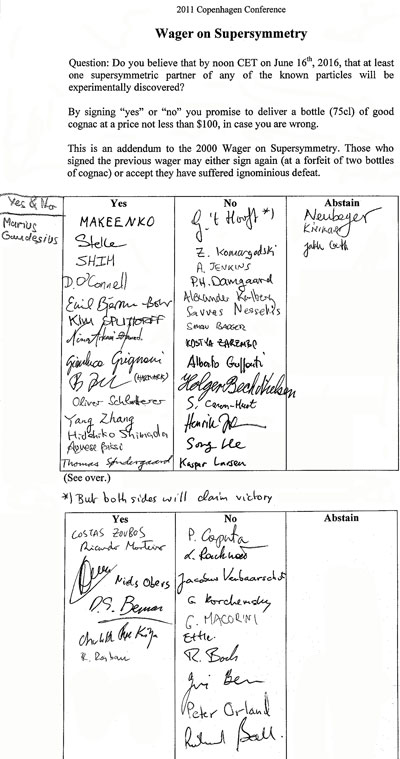
Wikipedia.orgA section of the LHC

On 19 August 2016, the ‘SUSY Bet’ event took place in Copenhagen at the conference on Current Themes in High Energy Physics and Cosmology at the Niels Bohr International Academy. An adjudication of the wager on supersymmetry (SUSY) first made in 2000 was given. The detail of the wager is explained in figure 1.

**Supersymmetry**

What is supersymmetry? In particle physics, supersymmetry is a proposed type of spacetime symmetry that relates two basic classes of elementary particles: bosons, which have an integer-valued spin, and fermions, which have a half-integer spin. Each particle from one group is associated with a particle from the other, known as its superpartner. It has been these supersymmetric partner particles that have been sought in high energy particle experiments.1

The bet involved two aspects of supersymmetry theory:

[](https://dl0.creation.com/articles/p128/c12881/SUSY-bet-lge.jpg)**Figure 1.** Details of the famous SUSY Bet, adjudicated on 16 August 2016.

1. That after 10 years (from 2000) the Large Hadron Collider (LHC) would have collected enough experimental data to confirm or deny the existence of the supersymmetric particles that the theoretical physicists were thinking about at that time.
2. That supersymmetric particles with sufficiently low masses would be discovered like “sitting ducks” (as Gerard ’t Hooft put it).

String theory does not have any experimental support and SUSY has not fulfilled its promise, therefore it does not help us trust in such a theory.

At the event the ‘Yes’ side of the bet, who believed the particles would be detected, conceded the loss of the bet to the ‘No’ side. The bet was meant to be decided on 16 June 2016, if no SUSY particle was detected after effectively 10 years of operation of the LHC. The adjudication of the bet was extended by the ‘No’ side by an additional six years due to delays in getting the LHC online, which included a two-year delay due to an explosion.

On the larger question of the significance of the negative LHC results, a recorded video statement by Nobel Laureate Gerard ’t Hooft (who had bet against SUSY) can be viewed online,2 and a statement by Stephen Hawking (not in on the bet, but in the audience) claimed that if arguments for SUSY were correct, the LHC should have seen something, so they think nature has spoken and there’s something wrong with the idea.

The losers of the bet who spoke at the event—Nima Arkani-Hamed, David Gross and David Shih—demonstrated the lesson about science that supersymmetry and superstring theory have taught us: particle theorists backing these ideas won’t give up on them, no matter what. They all took the position that they still weren’t giving up on SUSY, despite losing the bet.

Gerard’t Hooft commented that all evidence so far has been circumstantial at best. No direct evidence has ever been found in support of supersymmetry and hence string theory, because SUSY would be an essential element in string theory.3 String theory does not have any experimental support and SUSY has not fulfilled its promise, therefore it does not help us trust in such a theory. Therefore he found the ‘No’ side won the bet.

With the non-detection of any SUSY particles and the essential demise of string theory (that is how good experimental physics should work) it also does not bode well for dark matter.

**Dark matter**

We all know that the Higgs boson—the so-called God particle—was discovered after the LHC became fully operational, but SUSY has not been established. And the Higgs discovery has meant some very important restrictions on the type of fields the universe might have undergone in the alleged cosmic inflation epoch.4 However there is one more ramification.

It was hoped that the lowest mass SUSY particle would turn out to be a dark matter candidate. Now that observations have ruled out MACHOs5 as possible candidates for dark matter, WIMPs (or Weakly Interacting Massive Particles) are the only remaining contender. They comprise an entirely new class of fundamental particles that has emerged from supersymmetry theory.6

Supersymmetry is a theoretical idea where known elementary particles have supersymmetric partner particles.1 This is not part of the highly successful, and experimental tested, standard model of particle physics, but is an untested theoretical extension beyond the standard model. In the so-called Minimal Supersymmetric Standard Model (MSSM), which was hypothesized to explain the hierarchy problem (which is, why elementary particles have the various masses they do), *the lightest stable supersymmetric particle is the neutralino. And the neutralino is the WIMP, the best hope for a dark matter particle*.6

**Conclusion**

With the non-detection of any SUSY particles and the essential demise of string theory (that is how good experimental physics should work) it also does not bode well for dark matter. The dark matter crisis has just gotten into a bigger crisis. The best candidate has been experimentally shown now to be extremely improbable. Where does that leave dark matter and the standard model of particle physics? Where does that leave the standard big bang model and big bang nucleosynthesis? In big, big trouble. It is a failed paradigm and should be discarded.

**Secular scientists blast the big bang**

**What now for naïve apologetics?**

by [Carl Wieland](https://creation.com/dr-carl-wieland-cv)

It’s amazing to see how many Christian leaders have not merely tolerated the ‘big bang’ idea, but embraced it wholeheartedly. To hear their pronouncements, believers should welcome it as a major plank in our defense of the faith. ‘At last, we can use science to prove there’s a creator of the universe.’

However, the price of succumbing to the lure of secular acceptability, at least in physics and astronomy, has been heavy. We have long warned that adopting the big bang into Christian thought is like bringing the wooden horse within the walls of Troy. This is because:

The big bang forces acceptance of a sequence of events totally incompatible with the Bible.

* The big bang forces acceptance of a sequence of events totally incompatible with the Bible (e.g. earth after sun instead of earth before sun—see [Two worldviews in conflict](https://creation.com/two-worldviews-in-conflict) and [How could the days of Genesis 1 be literal if the Sun wasn’t created until the fourth day?](https://creation.com/how-could-the-days-of-genesis-1-be-literal-if-the-sun-wasnt-created-until-the-fourth-day))
* The big bang’s billions of years of astronomical evolution are not only based on naturalistic assumptions, they are contrary to the words of Jesus Himself, who said people were there from the beginning, not towards the end of an interminably long ‘creation’ process ([Mark 10:6](https://biblia.com/bible/esv/Mark%2010.6))—see [Jesus and the age of the world](https://creation.com/article/373#jesus_age).
* The slow evolution of the stars, then solar system and planets (including earth) in big bang thinking means that ‘big bang Christians’ are invariably dragged into accepting ‘geological evolution’ (millions of years for the earth’s fossil-bearing rocks to be laid down). So they end up denying the global Flood, and accepting death, bloodshed and disease (as seen in the fossils) before Adam. This removes the Fall and the Curse on creation from any effect on the real world, as well as removing *the* biblical answer Christians have always had to the problem of suffering and evil (God made a perfect world, ruined by sin). See [Terrorists and Death](https://creation.com/terrorists-and-death) and [The god of an old earth](https://creation.com/the-god-of-an-old-earth).
* Marrying one’s theology to today’s science means that one is likely to be widowed tomorrow.

In fact, the signs are strong that exactly that is happening, and that those who have ‘bought’ the big bang for its allegedly irrefutable science have been ‘sold a pup’. A bombshell ‘Open Letter to the Scientific Community’ by 33 leading scientists has been published on the internet (Cosmology statement) and in *New Scientist* (Lerner, E., Bucking the big bang, *New Scientist* **182**(2448)20, 22 May 2004). An article on www.rense.com titled ‘Big bang theory busted by 33 top scientists’ (27 May 2004) says, ‘Our ideas about the history of the universe are dominated by big bang theory. But its dominance rests more on funding decisions than on the scientific method, according to Eric Lerner, mathematician Michael Ibison of Earthtech.org, and dozens of other scientists from around the world.’

The open letter includes statements such as:

The big bang today relies on a growing number of hypothetical entities, things that we have never observed—inflation, dark matter and dark energy are the most prominent examples.

* ‘The big bang today relies on a growing number of hypothetical entities, things that we have never observed—inflation, dark matter and dark energy are the most prominent examples. Without them, there would be a fatal contradiction between the observations made by astronomers and the predictions of the big bang theory.’
* ‘But the big bang theory can’t survive without these fudge factors. Without the hypothetical inflation field, the big bang does not predict the smooth, isotropic cosmic background radiation that is observed, because there would be no way for parts of the universe that are now more than a few degrees away in the sky to come to the same temperature and thus emit the same amount of microwave radiation. … Inflation requires a density 20 times larger than that implied by big bang nucleosynthesis, the theory’s explanation of the origin of the light elements.’ [This refers to the *horizon problem*, and supports what we say in [Light-travel time: a problem for the big bang](https://creation.com/2002).]
* ‘In no other field of physics would this continual recourse to new hypothetical objects be accepted as a way of bridging the gap between theory and observation. It would, at the least, *raise serious questions about the validity of the underlying theory* [emphasis in original].’
* ‘What is more, the big bang theory can boast of no quantitative predictions that have subsequently been validated by observation. The successes claimed by the theory’s supporters consist of its ability to retrospectively fit observations with a steadily increasing array of adjustable parameters, just as the old Earth-centred cosmology of Ptolemy needed layer upon layer of epicycles.’

The dissidents say that there are other explanations of cosmology that do make some successful predictions. These other models don’t have all the answers to objections, but, they say, ‘That is scarcely surprising, as their development has been severely hampered by a complete lack of funding. Indeed, such questions and alternatives cannot even now be freely discussed and examined.’

Those who urge Christians to accept the big bang as a ‘science fact’ point to its near-universal acceptance by the scientific community. However, the 33 dissidents describe a situation familiar to many creationist scientists: ‘An open exchange of ideas is lacking in most mainstream conferences … doubt and dissent are not tolerated, and young scientists learn to remain silent if they have something negative to say about the standard big bang model. Those who doubt the big bang fear that saying so will cost them their funding.’

Evolutionist and historian of science, Evelleen Richards, has noticed that it’s hard even for rival *evolutionary* theories to get a hearing when challenging the ruling paradigm.

Evolutionist and historian of science, Evelleen Richards, has noticed that it’s hard even for rival *evolutionary* theories to get a hearing when challenging the ruling paradigm—see [Science … a reality check.](https://creation.com/science-a-reality-check) This should give some idea of the difficulties biblical creationists face.

But don’t we read, even in the daily newspapers, about many ‘observations’ that only ever seem to support the big bang? In fact, these prominent secular scientists say:

‘Even observations are now interpreted through this biased filter, judged right or wrong depending on whether or not they support the big bang. So discordant data on red shifts, lithium and helium abundances, and galaxy distribution, among other topics, are ignored or ridiculed.’

Science is a wonderful human tool, but it needs to be understood, not worshipped. It is fallible, changing, and is severely limited as to what it can and cannot determine. As CMI has often pointed out, instead of a scientific concept, the big-bang idea is more a dogmatic religious one—based on the religion of humanism1. As these big-bang opposers point out:

‘Giving support only to projects within the big bang framework undermines a fundamental element of the scientific method—the constant testing of theory against observation. Such a restriction makes unbiased discussion and research impossible.’

Furthermore, contrary to the naïve pronouncements of many who should know better, it is not in any sense a matter of ‘looking into a telescope and “seeing”? the big bang billions of years ago.’ As always, observations are interpreted and filtered through worldview lenses. Those who developed the big bang were guided by secular worldview filters just as much as those who are now crying that the emperor has no clothes. They wanted a universe that created itself; their opponents want an eternal, uncreated universe. From a Christian perspective, both are in open defiance of their Creator’s account of what really happened.

With Darwinism on the run, the Enemy of souls is seeking to seduce believers into embracing a more subtle, yet far deadlier way of evading the authority of the Bible. With progressive creationism/big-bangery rampaging through the evangelical community, he must think he is on a winner.

For a powerful, profound exposition of all of the issues involved in this, today’s most important evangelical compromise position, my colleague [Dr Jonathan Sarfati’s](https://creation.com/dr-jonathan-d-sarfati) just-released book [*Refuting Compromise*](https://creation.com/store_redirect.php?sku=10-2-575) is not just a casual recommendation ‘for further reading’. Chapter 5 pokes holes into the big bang, showing how it has become a ruling paradigm, supported by fallacious logic and ignoring many scientific problems—some confirmed by the above letter from big-bang–dissenting evolutionary cosmologists. It also shows how one can use a [‘first cause’ argument](https://creation.com/if-god-created-the-universe-then-who-created-god) without needing the big bang. The book is in fact destined to become a Christian classic, a culture-changing colossus of ‘cut-through-the-smokescreen’ clarity and logic. I urge all who are reading this to get [*Refuting Compromise*](https://creation.com/store_redirect.php?sku=10-2-575), read it, lend it and give it out far and wide.

**Crisis in cosmology continues with conference of big-bang dissidents**

by [John Hartnett](https://creation.com/dr-john-hartnett-bio)

Image NASA, ESA, J. Hester (Arizona State University) 

On 7–11 September 2008, about 50 dissident astronomers and physicists met at the Red Lion hotel in the quiet harbour town of Port Angeles, Washington, USA. I was one of them. They met to discuss problems facing the ‘big bang’ model of the structure and origin of the Universe, in the hope of one day developing a robust replacement that is not plagued with the problems the standard model faces.

This was the second in a series that started in Portugal in 2005. The conference was titled **Crisis in Cosmology 2: Challenges to Consensus Cosmology and the Quest for a New Picture of the Universe.**

It was also attended by a few dozen interested observers, and the local media.

Remarkably, the conference coincided with the commissioning of the Large Hadron Collider (LHC) at CERN in Geneva and reporters1 asked questions about the possibility of the LHC recreating some initial conditions of the early big bang universe. As it had been often reported that the LHC may create mini black holes2 and suck the Earth into its wake, the timing seemed perfect. [But see [our article on the LHC hype](https://creation.com/the-large-hadron-collider-lhc-will-a-black-hole-swallow-us)—Editors].

The ‘big bang’ theory is a house of tissue paper that is about to collapse under its own weight.—Non-creationist physicist David Dilworth

Scientists from the conference told reporters that such questions hardly apply because the ‘Big Bang’ origin of the universe is a *myth*—it never happened. The *Daily Peninsula News* quoted them as follows:

‘Said physicist David Dilworth: The “big bang” theory is a house of tissue paper that is about to collapse under its own weight.’

And,

‘Cosmology studies the natural order of the universe. A “good cosmology” would explain how the universe works, but not necessarily explain its origin, Van Flandern said … the “big bang” theory does rely on unproven ideas.’

In that article, Van Flandern went on to say that a level of agreement had been reached amongst the attendees. I would actually dispute that, unless it refers to the fact that the only agreement was that the ‘big bang’ is a poor description when compared to what we observe. The common thread of the conference was that something better is needed. And there was a lot of emotion—it seemed each had his own cosmology, and most were also atheists.

Image ESA, and Digitized Sky Survey (Caltech) 

Most who attended were taking time off from their jobs or were self-employed. Only about eight were officially representing their own universities—myself included. Many others had been invited but were afraid to attend, afraid of being labelled by association with this group.

This group started the Alternate Cosmology group3 a few years ago with a general mission statement ‘Open Letter’4 that was published in *New Scientist* and outlined the many major problems with the standard LCDM (cold dark matter) ‘big bang’ cosmology.

Initially only a small number had signed the Letter, but when the website went up the list grew to more than 300, many from reputable universities.

During the introductory comments Peter Beckman was quoted saying, ‘He peered past the giants who were blocking the light.’ This was in the context of Sir Isaac Newton, who referring to his scientific advances, said ‘I have seen farther by standing on the shoulders of giants’—those who had gone on before. Clearly they feel that the dominance of the standard model now stifles new ideas—a dictatorship that controls how they must think.

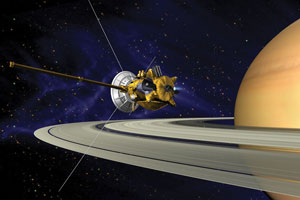
They feel that the dominance of the standard model now stifles new ideas—a dictatorship that controls how they must think.

I asked a few attendees what their reason was for disliking the ‘big bang’. For example, if it was found that it could explain the observational data without introducing fudge factors, would you accept it? One participant told me, ‘For me it is philosophical.’ Another said he *believed* the universe was static. Another said he didn’t *believe* in the ‘big bang’, because it begins in time and that must have been a miracle. (It always ends up being a matter of faith—a worldview.)

Tom van Flandern, of MetaResearch Institute, laid out his requirements for a good model. They included that there must be no miracles. He stressed that almost every day—as if he felt that if he said it often enough, others would eventually believe him. Some didn’t accept that condition (me included) but for those others who didn’t it seemed it was not because they believed in miracles but because they believed the universe itself could create matter out of the ‘nothing’ i.e. creation *ex nihilo*.

Van Flandern was very dogmatic about not being dogmatic. He was convinced of his own belief in a static infinite eternal flat universe. He was quite forceful in putting his view, excluding all others.

I presented the work I have done on large scale periodic structure of the universe as determined from the Sloan Digital Sky Survey (SDSS) and the 2 degree Field Galaxy Redshift Survey (2dF GRS). Eric Lerner commented that what I have shown them may well be the largest single space structure ever discovered—1 billion light-years across. I think it could well indicate that our galaxy is cosmologically near the center of the physical universe—that we can see anyway.

Image NASA/JPL 

Lerner presented his analysis of the Tolman surface brightness test for galaxies as a function of redshift (from z = 0.03 to 5.7), hence distance in the universe, when we look deeper and deeper into space. His claim is that the data will only fit a static non-expanding universe. This was also supported by a study of the separation between hydrogen clouds from Hubble Space telescope data. It found that they have constant separation as a function of redshift. This is certainly contrary to the notion that space is expanding and hence to the ‘Big Bang.’ And it is also a problem to any expanding universe model.

There was a lot of emotion and little agreement amongst the attendees. At times emotions were so strong that discussion became heated. But these men are passionate and I believe it is better to be passionate and seek a better answer, than to passively accept a flawed model. There is desire among them to expose the ‘big bang’, but they really don’t know how to proceed. It seems to again be a battle between David and Goliath.

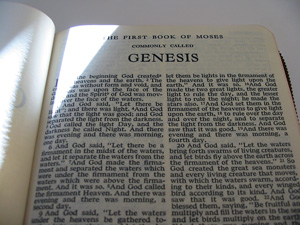
While Van Flandern, as stated earlier, was very up front about rejecting miracles, others didn’t necessarily agree. As one told me, that supposes he knows all that can be known about the universe. It is a pity that this talented group is so against the notion of a Creator, who told us that He did create the Universe in a specific way some six thousand years ago as measured by Earth clocks. It is only left up to us to find out some of the details.

**The use of Genesis in the New Testament**

by [Lita Sanders](https://creation.com/lita-sanders)

**Published: 24 August 2010 (GMT+10)  
Re-featured on homepage: 21 June 2022 (GMT+10)**

**This is the pre-publication version which was subsequently revised to appear in *Creation*** [**33(2):16–19.**](https://creation.com/creation-magazine-332-contents)

Photo sxc.hu

I am often asked why someone specializing in the New Testament would care about the “Old Testament” issue of creation. After all, one’s view on the first chapters of Genesis seems peripheral at best when it comes to interpreting the New Testament. But I believe that one’s interpretation of Genesis has implications for many doctrines which are taught most clearly in the New Testament.

First, a New Testament scholar’s view of creation matters because [Genesis was important to the New Testament authors](https://creation.com/new-testament-creation). [Every New Testament author](https://creation.com/genesis-bible-authors-believed-it-to-be-history) quotes or alludes to Genesis. The New Testament has a total of 60 allusions to [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311) specifically, and when we widen the search to include all of Genesis, the number grows to 103. For such a tiny body of literature, the New Testament has a staggering amount of references back to Genesis (see the [list below](https://creation.com/genesis-new-testament#NTreferences)).

But simply giving a list of references to Genesis proves nothing—[we must look at *how* the New Testament authors used Genesis](https://creation.com/quotations-in-the-new-testament-do-they-mean-that-the-quoted-book-is-totally-authoritative) in order to discern their view. Overwhelmingly, it is presumed to be a *historical* document; the only place where it could even be argued that it is not necessarily used historically is in the borrowing of Edenic symbols in Revelation to describe the New Jerusalem (depending on one’s eschatological view1). But this is the exception, and in any case, even a symbolic use has an underlying literal reality—the figurative “strong as an ox” would mean nothing unless an ox were literally strong, and the allusion to an Edenic paradise underscores the reality of this pre-Fall world without a curse.

**Jesus and the Gospels**

Jesus’ use of Genesis sets the tone for how it will be used in the rest of the New Testament. He uses it both to explain doctrine and to draw historical analogies. An example of the former use is in [Matthew 22:15–22](https://biblia.com/bible/esv/Matt%2022.15%E2%80%9322) (parallels in [Mark 12:13–17](https://biblia.com/bible/esv/Mark%2012.13%E2%80%9317) and [Luke 20:20–36](https://biblia.com/bible/esv/Luke%2020.20%E2%80%9336)) where the Pharisees and Herodians questioned Him about taxes. For Jesus, because the coin bears Caesar’s image, it is Caesar’s property and should be rendered to him—but He adds the command to give to God what is God’s. In the context, the image on the coin determines who owns it, so specifically what is in view here is that which is in God’s image. Jesus is referring back to [Genesis 1:26–27](https://biblia.com/bible/esv/Gen%201.26%E2%80%9327):

“In the present, proper humility before God requires the payment of Roman taxes, but if it is true that some of one’s money should go to the Caesar, it is so much more true that all that one is needs to be handed over to the God in whose image one is made.”2

Of course, if humanity had not actually been made in the image of God like Genesis teaches, the whole precedent would fall apart.

Luke’s genealogy back to Adam, who is called a son of God (not the son of ape-like creatures or pond scum). There is absolutely no evidence that Luke takes the earliest ancestors to be less historical than the more recent ones.

In Jesus’ day, there was a debate about whether divorce was allowed for any reason, or only for adultery. When asked to weigh in, Jesus essentially goes beyond the Law back to creation and quotes [Genesis 1:27](https://biblia.com/bible/esv/Gen%201.27) and [2:24](https://biblia.com/bible/esv/Genesis%202.24) to establish that God made man male and female and intended marriage to be between a man and a woman for life. This bond of loyalty transcends all other loyalties, even to one’s parents, except loyalty to God. The Pharisees ask why Moses commanded that a man give his wife a certificate of divorce to send her away. Jesus retorts that Moses *allowed* (never commanded) divorce because of rebellion (hardness of heart). But divorce violates the will of God which is expressed in the created order itself, and that overrides even the Law.

This quote of Genesis reveals Jesus’ thoughts on the timeline of creation, as well, because He said that it was this way “[from the beginning of creation](https://creation.com/but-from-the-beginning-of-the-institution-of-marriage).” If Jesus is speaking on a timescale of 4,000 years from creation to His day, it makes sense to refer to something which was instituted on Day 6 as “from the beginning of creation.” But it makes no sense to refer to it as “the beginning of creation” if there were millions of years before the creation of mankind. See also [Jesus on the age of the earth](https://creation.com/jesus-age-earth).

Often Jesus compares the people in His own day to people from Genesis. Capernaum is worse than Sodom, because Jesus said that the Sodomites would have repented if they’d seen the miracles performed in Capernaum ([Matthew 11:23–24](https://biblia.com/bible/esv/Matt%2011.23%E2%80%9324)). Jesus’ contrasted Abraham’s eager expectation of His day with the rejection of the Pharisees who claimed to be his descendents ([John 8:33–41](https://biblia.com/bible/esv/John%208.33%E2%80%9341))—as well as contrasting Abraham’s coming into existence with His own eternal pre-existence (v. 58). And He predicted that the end days would be like the days of Noah and of Lot—destruction would come swiftly and without warning ([Luke 17:26–29](https://biblia.com/bible/esv/Luke%2017.26%E2%80%9329)). In every case, there is no hint that Jesus is taking these events in less than a historical manner.

Luke was a consummate historian, and his Gospel gives us more precise chronological details than any other one. Luke sees Jesus’ life and ministry as rooted in history. While Matthew’s genealogy emphasizes Jesus’ Jewishness and His claim to the throne of David, Luke’s genealogy ([Luke 3](https://biblia.com/bible/esv/Luke%203)) goes further back, to Adam, who is called a son of God (*not* the son of ape-like creatures or pond scum). There is absolutely no evidence that Luke takes the earliest ancestors to be less historical than the more recent ones; his inclusion of Adam to Abraham in the genealogy affirms the historicity of those characters, and identifies Christ as related to all of humanity.3 Interestingly, the “most historical” gospel4 has the most references to Genesis.

John’s Gospel is the most overtly “theological” in that he liberally inserts his own commentary about the meaning of the events he records. Instead of a birth narrative like Luke’s and Matthew, he goes back [to creation](https://creation.com/john-the-creation-evangelist) to begin his Gospel. “In 1:1–5, John traces his account of Jesus farther back than the beginning of the ministry, farther back than the virgin birth, farther back even than the creation. The account must reach back to the eternal, divine Word, God’s agent in creation and the fount of life and light.”5 John’s opening “in the beginning” is an unmistakable reference to the opening verse of Genesis,6 but the creation of heaven and earth comes in only in v. 3 in John. To understand Jesus’ mission, we have to understand His identity, and to John, He is nothing less than the divine Word who was pre-existent with the Father in the beginning.

**The Earliest Church’s Preaching**

When the apostles and earliest Christians preached to Gentiles who did not have any background in the Jewish Scriptures, they went back to creation as a foundation for their preaching and the proclamation of the Gospel.

When the apostles and earliest Christians preached to a Jewish audience, they preached from the foundation of the Jewish Scriptures; Jewish history and the Abrahamic and Davidic promises are prominent ([Acts 2:14–41](https://biblia.com/bible/esv/Acts%202.14%E2%80%9341); [7:2–14](https://biblia.com/bible/esv/Acts%207.2%E2%80%9314)). But when they preached to Gentiles who did not have this background in the Jewish Scriptures, they went back to creation as a foundation for their preaching ([Acts 14:15–17](https://biblia.com/bible/esv/Acts%2014.15%E2%80%9317); [17:24–31](https://biblia.com/bible/esv/Acts%2017.24%E2%80%9331)). They take creation and the ancestry of all men from Adam to be historical (v. 26), and it is their basis for leading in to a proclamation of the Gospel.

**Romans**

Creation and the Fall are woven into the entire theology of Romans. God’s power is revealed through creation, and men are condemned because they do not recognize this ([Romans 1:19–20](https://biblia.com/bible/esv/Rom%201.19%E2%80%9320)). The Gentile is condemned because of idolatry and immorality, and the Jew is condemned because of failure to perfectly keep the Law, which was always intended only to multiply transgressions, never to save. Having painted an overwhelmingly bleak picture, Paul is able to contrast it with the good news of Christ: “But now a righteousness from God, apart from law, has been made known, to which the Law and the Prophets testify. This righteousness from God comes through faith in Jesus Christ to all who believe” ([Romans 3:21–22](https://biblia.com/bible/esv/Rom%203.21%E2%80%9322)). Paul explains that Jesus was an atoning sacrifice for sin. But when Paul is explaining how the sacrifice of one man can make many righteous, [he goes back to Genesis](https://creation.com/romans-5-pauls-literal-adam), and reasons that since death came through a man, Adam, it follows that the gift of righteousness should also come through one man, Christ (5:12–21).

This comparison is very significant for discerning Paul’s use of Genesis, because “Paul is not simply comparing Adam to Christ, but rather the effects of Adam’s actions on the human race with the effects of Christ’s action.”7 But Paul is not *comparing* as much as *contrasting* the two actions; “this is not intended to be a comparison of exact equals but is a way of highlighting both misdeeds and good deeds and their effects.”8 Paul is arguing that these two individuals acted in ways that affected all who came after them—Adam’s sin affects all who are descended from him, and Christ’s obedience affects all who believe in Him. But only historical people and historical actions can have real world consequences. A mythical Adam whose disobedience is only an allegory for human sinfulness cannot be a type of Christ. See also [Romans 5:12–21: Paul’s view of literal Adam](https://creation.com/romans-5-pauls-literal-adam).

In [Romans 8](https://creation.com/cosmic-and-universal-death-from-adams-fall-an-exegesis-of-romans-819-23a), Paul teaches that not only humanity, but all of creation has been subjected to futility because of man’s sin, and awaits liberation from its bondage to decay (19–22). Commentators on Romans, regardless of their view of Genesis, agree that Paul believed that it was God who subjected creation to futility at the Fall. See [Cosmic and universal death from Adam’s fall: an exegesis of Romans 8:19–23a](https://creation.com/cosmic-and-universal-death-from-adams-fall-an-exegesis-of-romans-819-23a).

**1 and 2 Corinthians**

The letters to the Corinthian church are good examples of how Paul used Scripture when he was writing to Gentile churches. It is no surprise that Paul refers back to the created order many times. The Corinthian believers are to refrain from sexual immorality because it is improper to join part of the body of Christ to a prostitute ([1 Corinthians 6:12–20](https://biblia.com/bible/esv/1%20Cor%206.12%E2%80%9320)). His sole reference to Scripture in support of his argument is a quote of [Genesis 2:24](https://biblia.com/bible/esv/Gen%202.24). Regarding the issue of head coverings in worship, apparently unconnected to creation, Paul cites the created order—man was created first, and then woman—in defense of his ruling that men should pray and prophesy with their heads uncovered and women9 should pray and prophesy with their heads covered.

[In [Romans 5](https://biblia.com/bible/esv/Rom%205),] Paul is arguing that these two individuals acted in ways that affected all who came after them—Adam’s sin affects all who are descended from him, and Christ’s obedience affects all who believe in Him. But only historical people and historical actions can have real world consequences.

But without a doubt, Paul’s most important use of Genesis is in [1 Corinthians 15](https://biblia.com/bible/esv/1%20Cor%2015), where Paul defends the physical resurrection of the dead.10 His argument, much like his argument in [Romans 5:12–21](https://biblia.com/bible/esv/Rom%205.12%E2%80%9321), is that Adam and Christ constitute two heads of humanity. Death came because of Adam’s sin, but the resurrection came through Christ. Because believers are under Christ, believers will also rise. And because Christ rose *as a man*, we can be sure that our resurrection will be like His; it wasn’t a different sort of resurrection because of His deity. Again, the state of humanity is said to stem from the historical actions of actual people which actually affect those who come after them. And Paul is using this sort of argument to defend one of the cardinal dogmas of the Christian faith, [the resurrection](https://creation.com/the-resurrection-and-genesis), without which Paul says we are without hope!

**Other Pauline Letters**

Paul’s other letters are sprinkled with references to Genesis; and the vast majority are to the reality of Creation and God as the Creator. This is reiterated in all sorts of contexts, with practical bearing on how the Church conducts itself.

**Hebrews**

The book of the Hebrews is written to Jewish Christians who are facing social pressure to renounce their faith and return to Judaism. The author’s view is that trading Christ for social acceptance has disastrous *eternal* consequences. It is not surprising that the author refers to the Old Testament scriptures that the Jewish Christians would know well; only Luke’s Gospel has more references to Genesis, and no New Testament book has more references to [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311).

[Hebrews 11](https://biblia.com/bible/esv/Heb%2011) lists Abel, Enoch, and Noah, from [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311), as heroes of the faith without distinguishing them as less historical than the other members of the list. Just like [Luke 3](https://biblia.com/bible/esv/Luke%203), the author moves seamlessly from [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311) to the rest of the Bible, without the slightest hint, ‘now we are moving from allegory or myth to history.’

The rest that the persevering believer enters into is compared to [God’s rest on Day 7](https://creation.com/gods-rest-in-hebrews-4111) as well as the rest that was promised to the Hebrews coming out of Egypt.

The author refers to Jesus as a high priest, interceding before the Father for us. But Jesus was from the tribe of Judah, not the priestly tribe of Levi, and certainly not from the line of Aaron, through whom all the high priests of the Levitical order had to come. The author insists that Jesus is the high priest of a new order, which was brought about by the new law. This is the order of Melchizedek—the author refers back to an obscure figure in Genesis (14:18–20), who is referred to once in [Psalm 110:4](https://biblia.com/bible/esv/Ps%20110.4)), to justify Jesus’ office as high priest.

[Hebrews 11](https://biblia.com/bible/esv/Heb%2011) lists Abel, Enoch, and Noah, from [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311), as heroes of the faith without distinguishing them as less historical than the other members of the list. Just like [Luke 3](https://biblia.com/bible/esv/Luke%203), the author moves seamlessly from [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311) to the rest of the Bible, without the slightest hint, “now we are moving from allegory or myth to history.”

**Peter**

Peter’s epistles also show a firm belief in a historical Genesis. In 1 Peter he affirms that eight people were saved in the ark, and in 2 Peter he says that sinning angels were sent to Tartarus in close connection with the Flood as a judgment for ungodliness on the earth and saving Noah and his family in the ark. He also affirms that the earth was formed out of water, and was destroyed by water.

**Jude**

Jude is widely regarded as being very close to 2 Peter, and this one-chapter book has four references to Genesis. Like 2 Peter, he refers to the sinning angels, but this time it’s closely connected to the strange-flesh perversions of Sodom and Gomorrah. He also accepts [Genesis 5](https://creation.com/biblical-chronogenealogies) as a strict chronogenealogy without gaps, since Enoch is “seventh from Adam”.

**Revelation**

The interpretation of Revelation is notoriously difficult, and end-times scenarios are a point of debate among even otherwise like-minded Christians. But while Revelation may pose unique difficulties of interpretation, it also gives us some important references to Genesis. First, there is a theme of “uncreation” as the earth is being destroyed—judgment in the Bible is commonly pictured as a reversal of creation, e.g. the Flood took the world back to its condition on Day 2, before the land and water had separated, so the land was totally submerged again; [Jeremiah 4:23](https://biblia.com/bible/esv/Jer%204.23) alludes to an uncreation back to the state in [Genesis 1:2](https://biblia.com/bible/esv/Gen%201.2)—the judgment would be so severe that it would leave the final state as empty as the earth before God created anything.

But more importantly, the New Jerusalem is filled with Edenic imagery—the Tree of Life, river, and the continual presence of God in the New Jerusalem mark, if not a return to Eden, a restoration of redeemed humanity to unfettered access to and fellowship with God. There is no more curse and no more sin in the New Jerusalem—humanity and creation is returned to an unfallen state.

**Conclusion**

It would require a book-length study to examine all the New Testament references in the depth that they deserve, but this brief overview should show how important a historical view of Genesis is for New Testament interpretation. It should also be noted that simply giving references to Genesis does not give the full picture—there are many doctrines which make no sense apart from [their foundation in Genesis](https://creation.com/new-testament-doctrines-and-the-creation-basis), and much of the New Testament teaching makes no sense unless one assumes that foundation.

**New Testament references to Genesis**

This list shows New Testament references by allusion or quotation to Genesis. Entries shown with parenthetical numbering show references to [Genesis 1–11](https://biblia.com/bible/esv/Gen%201%E2%80%9311).

|  |  |  |
| --- | --- | --- |
| 1 | [Matthew 1:1–3](https://biblia.com/bible/esv/Matt%201.1%E2%80%933) | Ancestors of Jesus |
| 2 | [Matthew 2:18](https://biblia.com/bible/esv/Matt%202.18) | Rachel |
| 3 | [Matthew 3:8–9](https://biblia.com/bible/esv/Matt%203.8%E2%80%939) | Abraham’s children |
| 4 | [Matthew 10:15](https://biblia.com/bible/esv/Matt%2010.15) | Sodom and Gomorrah |
| 5 | [Matthew 11:23–24](https://biblia.com/bible/esv/Matt%2011.23%E2%80%9324) | Sodom |
| 6 | (1) [Matthew 19:4](https://biblia.com/bible/esv/Matt%2019.4) | Quote from [Gen 1:27](https://biblia.com/bible/esv/Gen%201.27) |
| 7 | (2) [Matthew 19:5](https://biblia.com/bible/esv/Matt%2019.5) | Quote from [Gen 2:24](https://biblia.com/bible/esv/Gen%202.24) |
| 8 | (3) [Matthew 22:21](https://biblia.com/bible/esv/Matt%2022.21) | Man in the image of God |
| 9 | [Matthew 22:31–2](https://biblia.com/bible/esv/Matt%2022.31%E2%80%932) | God of Abraham, Isaac, and Jacob |
| 10 | (4) [Matthew 23:35](https://biblia.com/bible/esv/Matt%2023.35) | Righteous Abel |
| 11 | (5) [Matthew 24:37–39](https://biblia.com/bible/esv/Matt%2024.37%E2%80%9339) | Days of Noah |
| 12 | (6) [Matthew 26:52](https://biblia.com/bible/esv/Matt%2026.52) | Those who draw the sword will die by the sword |
| 13 | (7) [Mark 10:6](https://biblia.com/bible/esv/Mark%2010.6) | Quote from [Gen 1:27](https://biblia.com/bible/esv/Gen%201.27) |
| 14 | (8) [Mark 10:7](https://biblia.com/bible/esv/Mark%2010.7) | Quote from [Gen 2:24](https://biblia.com/bible/esv/Gen%202.24) |
| 15 | (9) [Mark 12:17](https://biblia.com/bible/esv/Mark%2012.17) | Man in the image of God |
| 16 | [Mark 12:26](https://biblia.com/bible/esv/Mark%2012.26) | God of Abraham, Isaac, and Jacob |
| 17 | (10) [Mark 13:19](https://biblia.com/bible/esv/Mark%2013.19) | God created the world |
| 18 | [Luke 1:25](https://biblia.com/bible/esv/Luke%201.25) | Elizabeth’s reproach is taken away like Rachel’s |
| 19 | [Luke 1:48](https://biblia.com/bible/esv/Luke%201.48) | Mary will be called blessed like Leah |
| 20 | [Luke 1:55](https://biblia.com/bible/esv/Luke%201.55) | Abraham and his descendants |
| 21 | [Luke 1:73](https://biblia.com/bible/esv/Luke%201.73) | God’s oath to Abraham |
| 22 | [Luke 3:8](https://biblia.com/bible/esv/Luke%203.8) | Children of Abraham |
| 23 | (11) [Luke 3:29–37](https://biblia.com/bible/esv/Luke%203.29%E2%80%9337) | Jesus is descendent of Adam |
| 24 | [Luke 10:12](https://biblia.com/bible/esv/Luke%2010.12) | Sodom |
| 25 | (12) [Luke 10:19](https://biblia.com/bible/esv/Luke%2010.19) | Treading on serpents |
| 26 | (13) [Luke 11:51](https://biblia.com/bible/esv/Luke%2011.51) | Abel the first slain prophet |
| 27 | [Luke 13:16](https://biblia.com/bible/esv/Luke%2013.16) | Daughter of Abraham |
| 28 | [Luke 16:22–31](https://biblia.com/bible/esv/Luke%2016.22%E2%80%9331) | Abraham |
| 29 | (14) [Luke 17:26–27](https://biblia.com/bible/esv/Luke%2017.26%E2%80%9327) | Days of Noah |
| 30 | [Luke 17:28–29](https://biblia.com/bible/esv/Luke%2017.28%E2%80%9329) | Days of Lot |
| 31 | [Luke 17:32](https://biblia.com/bible/esv/Luke%2017.32) | Lot’s wife |
| 32 | (15) [Luke 20:25](https://biblia.com/bible/esv/Luke%2020.25) | Man in the image of God |
| 33 | [Luke 20:37](https://biblia.com/bible/esv/Luke%2020.37) | God of Abraham, Isaac, and Jacob |
| 34 | (16) [John 1:1–3](https://biblia.com/bible/esv/John%201.1%E2%80%933) | God pre-existed and created |
| 35 | [John 1:51](https://biblia.com/bible/esv/John%201.51) | Reference to Jacob’s ladder |
| 36 | [John 4:5–6](https://biblia.com/bible/esv/John%204.5%E2%80%936), [11–12](https://biblia.com/bible/esv/John%204.11%E2%80%9312) | Jacob’s well |
| 37 | [John 7:22](https://biblia.com/bible/esv/John%207.22) | Circumcision came from the patriarchs |
| 38 | [John 8:33](https://biblia.com/bible/esv/John%208.33) | Jews are Abraham’s descendents |
| 39 | (17) [John 8:44](https://biblia.com/bible/esv/John%208.44) | The devil a liar and murderer |
| 40 | [Acts 7:2–14](https://biblia.com/bible/esv/Acts%207.2%E2%80%9314) | History of Abraham, Isaac, Jacob, and Joseph |
| 41 | (18) [Acts 14:15](https://biblia.com/bible/esv/Acts%2014.15) | God made heaven and earth and everything in them |
| 42 | (19) [Acts 15:20](https://biblia.com/bible/esv/Acts%2015.20), [29](https://biblia.com/bible/esv/Acts%2015.29) | Possible reference to Noahic covenant |
| 43 | (20) [Acts 17:24](https://biblia.com/bible/esv/Acts%2017.24) | God made the earth and everything in it |
| 44 | (21) [Acts 17:26](https://biblia.com/bible/esv/Acts%2017.26) | All nations descended from one man |
| 45 | (22) [Romans 1:19–20](https://biblia.com/bible/esv/Rom%201.19%E2%80%9320) | God’s power revealed through creation |
| 46 | [Romans 4:1–25](https://biblia.com/bible/esv/Rom%204.1%E2%80%9325) | Abraham justified by faith |
| 47 | (23) [Romans 5:12–21](https://biblia.com/bible/esv/Rom%205.12%E2%80%9321) | Death came because of Adam’s sin |
| 48 | (24) [Romans 8:20–23](https://biblia.com/bible/esv/Rom%208.20%E2%80%9323) | The entire creation was cursed |
| 49 | [Romans 9:7–13](https://biblia.com/bible/esv/Rom%209.7%E2%80%9313) | God chose Abraham, Isaac, and Jacob |
| 50 | [Romans 15:8](https://biblia.com/bible/esv/Rom%2015.8) | Christ fulfills promises made to patriarchs |
| 51 | (25) [Romans 16:20](https://biblia.com/bible/esv/Rom%2016.20) | Satan crushed under believers’ feet |
| 52 | (26) [1 Corinthians 6:16](https://biblia.com/bible/esv/1%20Cor%206.16) | Quote of [Gen 2:24](https://biblia.com/bible/esv/Gen%202.24) |
| 53 | (27) [1 Corinthians 11:7–8](https://biblia.com/bible/esv/1%20Cor%2011.7%E2%80%938) | Man in the image of God, and woman created after man |
| 54 | (28) [1 Corinthians 15:21–22](https://biblia.com/bible/esv/1%20Cor%2015.21%E2%80%9322) | Death comes through Adam |
| 55 | (29) [1 Corinthians 15:38](https://biblia.com/bible/esv/1%20Cor%2015.38) | Each kind of seed has its own body |
| 56 | (30) [1 Corinthians 15:45](https://biblia.com/bible/esv/1%20Cor%2015.45) | Quote of [Gen 2:7](https://biblia.com/bible/esv/Gen%202.7) |
| 57 | (31) [1 Corinthians 15:47](https://biblia.com/bible/esv/1%20Cor%2015.47) | First man made from dust |
| 58 | (32) [2 Corinthians 4:6](https://biblia.com/bible/esv/2%20Cor%204.6) | Quote of [Gen 1:3](https://biblia.com/bible/esv/Gen%201.3) |
| 59 | (33) [2 Corinthians 11:3](https://biblia.com/bible/esv/2%20Cor%2011.3) | Eve was deceived |
| 60 | [Galatians 3:6](https://biblia.com/bible/esv/Gal%203.6) | Quote of [Gen 15:6](https://biblia.com/bible/esv/Gen%2015.6) |
| 61 | [Galatians 3:8](https://biblia.com/bible/esv/Gal%203.8) | [Gen 12:3](https://biblia.com/bible/esv/Gen%2012.3); [18:18](https://biblia.com/bible/esv/Gen%2018.18); [22:18](https://biblia.com/bible/esv/Gen%2022.18) |
| 62 | [Galatians 3:16](https://biblia.com/bible/esv/Gal%203.16) | [Gen 12:7](https://biblia.com/bible/esv/Gen%2012.7); [13:15](https://biblia.com/bible/esv/Gen%2013.15); [24:7](https://biblia.com/bible/esv/Gen%2024.7) |
| 63 | (34) [Galatians 4:4](https://biblia.com/bible/esv/Gal%204.4) | Seed of the woman |
| 64 | [Galatians 4:22–30](https://biblia.com/bible/esv/Gal%204.22%E2%80%9330) | Abraham’s two sons |
| 65 | (35) [Ephesians 3:9](https://biblia.com/bible/esv/Eph%203.9) | God created all things |
| 66 | (36) [Ephesians 5:31](https://biblia.com/bible/esv/Eph%205.31) | Quote of [Gen 2:24](https://biblia.com/bible/esv/Gen%202.24) |
| 67 | (37) [Colossians 1:16](https://biblia.com/bible/esv/Col%201.16) | All things were created by the Son |
| 68 | (38) [Colossians 3:10](https://biblia.com/bible/esv/Col%203.10) | Image of the Creator |
| 69 | (39) [1 Timothy 2:13–14](https://biblia.com/bible/esv/1%20Tim%202.13%E2%80%9314) | Man created first |
| 70 | (40) [1 Timothy 2:14](https://biblia.com/bible/esv/1%20Tim%202.14) | Woman deceived |
| 71 | (41) [1 Timothy 4:3–5](https://biblia.com/bible/esv/1%20Tim%204.3%E2%80%935) | God created everything good |
| 72 | (42) [Hebrews 1:10](https://biblia.com/bible/esv/Heb%201.10) | God created heaven and earth |
| 73 | (43) [Hebrews 4:3–4](https://biblia.com/bible/esv/Heb%204.3%E2%80%934) | Quote of [Gen 2:2](https://biblia.com/bible/esv/Gen%202.2) |
| 74 | (44) [Hebrews 4:10](https://biblia.com/bible/esv/Heb%204.10) | God rested |
| 75 | [Hebrews 5:1–10](https://biblia.com/bible/esv/Heb%205.1%E2%80%9310) | Order of Melchizedek |
| 76 | [Hebrews 6:13–14](https://biblia.com/bible/esv/Heb%206.13%E2%80%9314) | [Genesis 22:17](https://biblia.com/bible/esv/Gen%2022.17) |
| 77 | [Hebrews 6:20–7:17](https://biblia.com/bible/esv/Heb%206.20%E2%80%937.17) | Order of Melchizedek |
| 78 | (45) [Hebrews 11:3](https://biblia.com/bible/esv/Heb%2011.3) | Universe formed by God’s command |
| 79 | (46) [Hebrews 11:4](https://biblia.com/bible/esv/Heb%2011.4) | Abel’s acceptable sacrifice |
| 80 | (47) [Hebrews 11:5](https://biblia.com/bible/esv/Heb%2011.5) | Enoch taken away |
| 81 | (48) [Hebrews 11:7](https://biblia.com/bible/esv/Heb%2011.7) | Noah’s ark |
| 82 | [Hebrews 11:8–12](https://biblia.com/bible/esv/Heb%2011.8%E2%80%9312) | Abraham |
| 83 | [Hebrews 11:17–22](https://biblia.com/bible/esv/Heb%2011.17%E2%80%9322) | Abraham’s sacrifice of Isaac and Abraham’s descendants |
| 84 | [Hebrews 12:16–17](https://biblia.com/bible/esv/Heb%2012.16%E2%80%9317) | Godless Esau |
| 85 | (49) [Hebrews 12:24](https://biblia.com/bible/esv/Heb%2012.24) | Blood of Abel |
| 86 | [James 2:21–23](https://biblia.com/bible/esv/James%202.21%E2%80%9323) | Abraham’s sacrifice of Isaac |
| 87 | [1 Peter 3:6](https://biblia.com/bible/esv/1%20Pet%203.6) | Sarah submitted to Abraham |
| 88 | (50) [1 Peter 3:20](https://biblia.com/bible/esv/1%20Pet%203.20) | 8 saved in the ark |
| 89 | (51) [2 Peter 2:4–5](https://biblia.com/bible/esv/2%20Pet%202.4%E2%80%935) | God punished sinning angels and saved Noah |
| 90 | [2 Peter 2:6–8](https://biblia.com/bible/esv/2%20Pet%202.6%E2%80%938) | Sodom and Gomorrah punished and Lot saved |
| 91 | (52) [2 Peter 3:5–6](https://biblia.com/bible/esv/2%20Pet%203.5%E2%80%936) | Earth formed out of and destroyed by water |
| 92 | (53) [1 John 3:11–12](https://biblia.com/bible/esv/1%20John%203.11%E2%80%9312) | Cain killed Abel |
| 93 | (54) [Jude 6](https://biblia.com/bible/esv/Jude%206) | Disobedient angels punished (reference to “sons of God”?) |
| 94 | [Jude 7](https://biblia.com/bible/esv/Jude%207) | Sodom and Gomorrah |
| 95 | (55) [Jude 11](https://biblia.com/bible/esv/Jude%2011) | Cain |
| 96 | (56) [Jude 14](https://biblia.com/bible/esv/Jude%2014) | Enoch the seventh from Adam |
| 97 | (57) [Revelation 4:3](https://biblia.com/bible/esv/Rev%204.3) | Rainbow surrounding the throne in Heaven |
| 98 | [Revelation 5:5](https://biblia.com/bible/esv/Rev%205.5) | Lion of Judah |
| 99 | (58) [Revelation 6:12–14](https://biblia.com/bible/esv/Rev%206.12%E2%80%9314) | “Uncreation” theme-sun, moon, and stars |
| 100 | [Revelation 10:6](https://biblia.com/bible/esv/Rev%2010.6) | God created the heaven and earth and all that is in them |
| 101 | [Revelation 20:2](https://biblia.com/bible/esv/Rev%2020.2) | The devil is the ancient serpent |
| 102 | (59) [Revelation 21](https://biblia.com/bible/esv/Rev%2021) | New Jerusalem—Edenic city |
| 103 | (60) [Revelation 22:1–6](https://biblia.com/bible/esv/Rev%2022.1%E2%80%936) | River of water of life and tree of life |

**多元宇宙：对进化没有帮助**

作者 [：杰克·赫伯特](https://creation.com/jake-hebert)

学分：123rf.com / 瓦迪姆·萨多夫斯基

创造论科学家早就指出了“粘给你”进化的巨大困难，甚至进化论者也承认了这些问题。1 此外，宇宙的基本常数被微调以允许生命。然而，许多进化论者声称，尽管有这些困难，多元宇宙可以解释我们的存在，而不需要造物主。1,2

这些进化论者声称我们的宇宙*不是*唯一的宇宙。他们认为，它只是无限多个宇宙中的一个，每个宇宙都有可能不同的物理常数（甚至可能有不同的物理定律）。他们说，这种多元宇宙消除了对超自然造物主的需求：如果真的有无限数量的宇宙，那么 这些宇宙中的一些将不可避免地具有允许生命存在的属性。据说，我们“很幸运”，恰好生活在这些允许生命的宇宙之一。3

那么，多元宇宙*真的*能解释我们没有上帝的存在吗？

据说，我们“很幸运”，恰好生活在这些允许生命的宇宙之一。

**概念的起源**

多元宇宙的概念是*暴胀理论的结果*。4 在大爆炸模型中，暴胀是早期宇宙膨胀率的急剧增加，甚至比光还快。暴胀被提出来解决原始大爆炸模型中的一些严重问题。5

理论家起初认为，通货膨胀在大爆炸之后不久就同时停止了。然而，他们后来得出结论，不同的空间区域会在不同的时间停止膨胀。这将导致非膨胀空间的“孤岛”（仍在扩张，但速度较慢）被大量仍在膨胀的空间包围，这将永远“切断”这些“岛”彼此之间的距离。这些“岛屿”将充满辐射和物质，实际上成为它们自己的宇宙！

理论家们也开始相信，一旦通货膨胀开始，它就永远不会停止。这意味着暴胀最终会产生无限数量的宇宙。在这种观点下，所谓的138亿年前的大爆炸只是*我们*宇宙的开始，而不是多元宇宙本身的开始。据说暴胀仍在太空的其他区域发生，甚至现在正在创造其他宇宙。6

但多元宇宙并不能真正解释我们的存在。

**A. 一些问题**

首先，没有任何证据表明存在其他宇宙，尽管这个想法经常在科幻电视节目和电影中普及。

其次，多元宇宙的想法是不科学的：因为这些“岛屿”宇宙（即使它们存在）将永远彼此隔离，所以很难看出它们的存在如何被证实或否认。由于多元宇宙的想法不能被证伪（被证明是错误的），它可以说不是一个真正的科学假设。7

第三，没有直接证据证明通货膨胀本身：最近关于通货膨胀的“确凿枪”证据的说法很快就被撤回了。8 相反，通货膨胀的主要“证据”是基于循环推理——没有通货膨胀，大爆炸就行不通的事实被算作通货膨胀的证据！9 此外，现代暴胀理论变得越来越离奇，这导致一些理论家批评并放弃它。麻省理工学院宇宙学家马克斯·泰格马克（Max Tegmark）就是其中一位批评者，他说：“通货膨胀已经自我毁灭了。它在逻辑上是自毁的。10 就连著名的暴胀理论家保罗·斯坦哈特（Paul Steinhardt）也成为该理论的批评者。11

**这顶帽子里没有兔子**

最重要的是，尽管通货膨胀理论的多元宇宙可能会让“咕噜咕噜”的故事看起来 更可信，但这只是一个幻觉。正如我们所看到的，进化论者声称多元宇宙中的一些宇宙不可避免地会有允许生命存在的物理和化学定律，而我们恰好生活在其中之一。但是，为了使他们的论点能够解释我们在没有造物主的情况下的存在，这些定律仅仅*允许*生命存在是不够的。显然，他们*确实*允许这样做，否则我们就不会在这里;但在圣经创造的场景中也是如此。为了使这一论点有利于进化，这些物理定律*还必须*允许从非生命中形成生命，也称为*化学进化*或*无生物发生*。但是 我们宇宙中的物理和化学定律允许这样做吗？

而且，现代通货膨胀理论变得越来越离奇，这导致一些理论家批评和放弃它。

进化论者仍然无法解释生命的起源，尽管在这个问题上投入了大量的时间和金钱。如果我们真的生活在一个物理和化学定律允许化学进化的宇宙中，为什么它从未被观察到？12 為什麼進化論研究人員仍然無法令人信服地解釋生命是如何「自然」出現的？

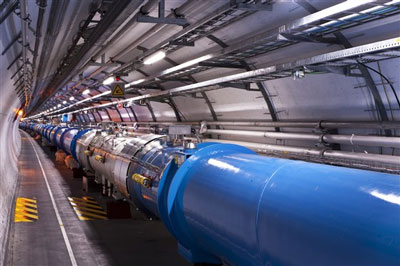
难道也许我们宇宙中的物理和化学定律根本不 允许生物发生？我们对这个宇宙中物理和化学的了解表明 ，生命不可能来自非生命。著名的进化论者保罗·戴维斯（Paul Davies）经常指出，生命就是信息（软件）——编程的机器。而且，他说，“没有已知的物理定律能够从无到有地创造信息。13

因此，即使其他宇宙确实存在，即使*这些其他假定宇宙中的每一个*  物理和化学定律确实*允许生物发生，这也无助 于解释这个宇宙中生命的存在*  。进化论者真的认为“咕噜咕噜”的进化故事中的巨大困难会仅仅因为他们声称其他宇宙存在而消失吗？

因此，多元宇宙的想法，虽然表面上可能使进化看起来更合理，但实际上怀疑论者在试图解释他们的存在时没有任何好处，除了他们的造物主。

**SUSY不是暗物质危机的解决方案**

作者 [：约翰·哈奈特](https://creation.com/dr-john-hartnett)

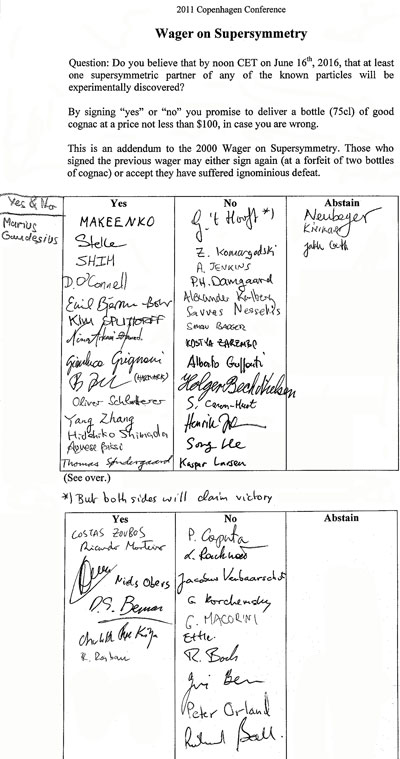
Wikipedia.org大型强子对撞机的一部分

2016年8月19日，“SUSY Bet”活动在哥本哈根尼尔斯玻尔国际学院举行的高能物理和宇宙学当前主题会议上举行。对2000年首次进行的超对称赌注（SUSY）进行了裁决。投注的细节在图 1 中进行了说明。

**超对称性**

什么是超对称？在粒子物理学中，超对称性是一种提出的时空对称性类型，它涉及两类基本粒子：具有整数值自旋的玻色子和具有半整数自旋的费米子。来自一组的每个粒子都与来自另一组的粒子相关联，称为其超伙伴。正是这些超对称伙伴粒子在高能粒子实验中被寻找。1

赌注涉及超对称理论的两个方面：

[](https://dl0.creation.com/articles/p128/c12881/SUSY-bet-lge.jpg)**图1.** 2016年8月16日裁定的著名SUSY投注详情。

1. 10年后（从2000年开始），大型强子对撞机（LHC）将收集足够的实验数据来确认或否认理论物理学家当时正在考虑的超对称粒子的存在。
2. 质量足够低的超对称粒子会像“坐鸭子”一样被发现（正如杰拉德·特·胡夫特所说）。

弦理论没有任何实验支持，SUSY也没有实现它的承诺，因此它不能帮助我们相信这样的理论。

在事件中，赌注的“是”一方相信粒子会被检测到，承认赌注的损失给了“否”一方。该赌注原定于2016年6月16日决定，如果在大型强子对撞机有效运行10年后没有检测到SUSY粒子。由于LHC上线的延迟，“否”方将赌注的裁决延长了六年，其中包括由于爆炸而延迟了两年。

关于大型强子对撞机阴性结果的重要性这一更大的问题，可以在网上观看诺贝尔奖获得者杰拉德·特·胡夫特（Gerard 't Hooft）（曾与SUSY打赌）录制的视频声明，2和斯蒂芬·霍金（Stephen Hawking）的声明（不是在赌注中，而是在观众中）声称，如果SUSY的论点是正确的，大型强子对撞机应该看到了一些东西， 所以他们认为大自然已经说话了，这个想法有问题。

在活动中发言的赌注输家——尼玛·阿卡尼-哈米德（Nima Arkani-Hamed）、大卫·格罗斯（David Gross）和大卫·施（David Shih）——展示了超对称和超弦理论教给我们的关于科学的一课：无论如何，支持这些想法的粒子理论家都不会放弃它们。他们都采取了这样的立场，即尽管输掉了赌注，但他们仍然没有放弃SUSY。

Gerard't Hooft评论说，到目前为止，所有的证据充其量都是间接的。没有发现直接证据支持超对称性，因此也支持弦理论，因为SUSY将是弦理论中的基本要素。3 弦理论没有任何实验支持，SUSY没有实现它的承诺，因此它不能帮助我们相信这样的理论。因此，他发现“不”的一方赢得了赌注。

由于没有检测到任何SUSY粒子和弦理论的本质消亡（这就是好的实验物理学应该如何工作），这对暗物质来说也不是好兆头。

**暗物质**

我们都知道希格斯玻色子——所谓的上帝粒子——是在大型强子对撞机完全投入运行后发现的，但SUSY尚未建立。希格斯粒子的发现意味着对宇宙在所谓的宇宙暴胀时代可能经历的场类型有一些非常重要的限制。4 然而，还有一个后果。

人们希望质量最低的SUSY粒子将成为暗物质候选者。既然观测已经排除了MACHOs5作为暗物质的可能候选者，WIMP（或弱相互作用大质量粒子）是唯一剩下的竞争者。它们构成了一类从超对称理论中出现的全新基本粒子。6

超对称是一种理论思想，其中已知的基本粒子具有超对称伙伴粒子。1 这不是非常成功和经过实验测试的粒子物理学标准模型的一部分，而是超越标准模型的未经测试的理论扩展。在所谓的最小超对称标准模型（MSSM）中，假设用于解释层次问题（即为什么基本粒子具有它们所做的各种质量），*最轻的稳定超对称粒子是中性粒子。而中性子就是WIMP，是暗物质粒子的最大希望*。6

**结论**

由于没有检测到任何SUSY粒子和弦理论的本质消亡（这就是好的实验物理学应该如何工作），这对暗物质来说也不是好兆头。暗物质危机刚刚陷入更大的危机。现在实验证明，最佳候选者极不可能。这让暗物质和粒子物理学的标准模型在哪里？这让标准的大爆炸模型和大爆炸核合成在哪里？在大麻烦中。这是一个失败的范式，应该被抛弃。

**世俗科学家大爆炸**

**现在天真的护教呢？**

作者[：卡尔·维兰德](https://creation.com/dr-carl-wieland-cv)

令人驚訝的是，許多基督徒領袖不僅容忍了“大爆炸”的想法，而且全心全意地接受它。要听到他们的宣告，信徒应该欢迎它作为我们捍卫信仰的主要木板。“最后，我们可以用科学来证明宇宙的创造者。

然而，屈服于世俗可接受性的诱惑，至少在物理学和天文学中，代价是沉重的。我们早就警告说，将大爆炸纳入基督教思想就像把木马带到特洛伊的城墙里一样。这是因为：

大爆炸迫使人们接受一系列与圣经完全不相容的事件。

* 大爆炸迫使人们接受一系列与圣经完全不相容的事件（例如，地球在太阳之后而不是地球在太阳之前——参见冲突[中的两种世界观](https://creation.com/two-worldviews-in-conflict)和[如果太阳直到第四天才被创造，创世记第一章的日子怎么可能是字面意思？](https://creation.com/how-could-the-days-of-genesis-1-be-literal-if-the-sun-wasnt-created-until-the-fourth-day))
* 大爆炸数十亿年的天文演化不仅基于自然主义的假设，而且与耶稣自己的话相反，耶稣自己说人们从一开始就在那里，而不是在无休止的漫长“创造”过程结束时（[马可福音10：6](https://biblia.com/bible/esv/Mark%2010.6)）——见 [耶稣和世界的年龄](https://creation.com/article/373#jesus_age)。
* 在大爆炸思维中，恒星、太阳系和行星（包括地球）的缓慢演化意味着“大爆炸基督徒”总是被拖入接受“地质进化”（地球含化石岩石铺设数百万年）。因此，他们最终否认了全球洪水，并在亚当面前接受了死亡、流血和疾病（如化石中所见）。这消除了堕落和对创造的诅咒对现实世界的任何影响，也消除了 基督徒对苦难和邪恶问题的圣经答案（上帝创造了一个完美的世界，被罪毁了）。参见[恐怖分子与死亡](https://creation.com/terrorists-and-death)和[旧地球之神](https://creation.com/the-god-of-an-old-earth)。
* 将一个人的神学与今天的科学结合起来意味着一个人明天可能会丧偶。

事实上，有强烈的迹象表明，这种情况正在发生，那些因其所谓的无可辩驳的科学而“购买”大爆炸的人已经被“卖给了小狗”。33位主要科学家的重磅炸弹“致科学界的公开信”已在互联网上发表（宇宙学声明）和*新科学家*（Lerner，E.，Bucking the Big Bang，*New Scientist* **182**（2448）20，2004年5月22日）。一篇 www.rense.com 题为“大爆炸理论被33位顶级科学家破坏”的文章（2004年5月27日）说：“我们对宇宙历史的看法是由大爆炸理论主导的。但它的主导地位更多地取决于资助决策，而不是科学方法，根据埃里克勒纳，Earthtech.org 数学家迈克尔·伊比森以及来自世界各地的其他数十名科学家的说法。

公开信包括以下声明：

今天的大爆炸依赖于越来越多的假设实体，这是我们从未观察到的事物 - 暴胀，暗物质和暗能量是最突出的例子。

* “今天的大爆炸依赖于越来越多的假设实体，这是我们从未观察到的东西 - 暴胀，暗物质和暗能量是最突出的例子。没有它们，天文学家的观测结果与大爆炸理论的预测之间就会有致命的矛盾。
* “但是，如果没有这些捏造因素，大爆炸理论就无法生存。如果没有假设的暴胀场，大爆炸就无法预测观测到的平滑、各向同性的宇宙背景辐射，因为现在距离天空超过几度的宇宙部分就不可能达到相同的温度，从而发出相同数量的微波辐射。...暴胀需要的密度是大爆炸核合成所暗示的密度的20倍，这是该理论对轻元素起源的解释。[这是指 *地平线问题*，并支持我们在[光旅行时间：大爆炸的问题中所说的](https://creation.com/2002)。
* “在物理学的其他领域，这种对新的假设对象的不断求助于被接受为弥合理论和观察之间差距的一种方式。这至少会 *引发对基本理论有效性的严重质疑* 。
* “更重要的是，大爆炸理论可以吹嘘没有随后通过观察验证的定量预测。该理论的支持者声称的成功在于它能够回顾性地将观测结果与稳步增加的可调参数阵列相匹配，就像托勒密的旧地球中心宇宙学需要一层又一层的周期一样。

持不同政见者说，宇宙学还有其他解释确实做出了一些成功的预测。这些其他模型对反对意见没有所有的答案，但是，他们说，“这并不奇怪，因为它们的发展因完全缺乏资金而受到严重阻碍。事实上，这些问题和替代方案甚至现在都无法自由讨论和审查。

那些敦促基督徒接受大爆炸作为“科学事实”的人指出，科学界几乎普遍接受它。然而，这33名持不同政见者描述了许多创造论科学家所熟悉的情况：“大多数主流会议都缺乏公开的思想交流......怀疑和异议是不能容忍的，如果年轻科学家对标准的大爆炸模型有负面的话要说，他们学会保持沉默。那些怀疑大爆炸的人担心这样说会让他们失去资金。

进化论者和科学史学家埃芙琳·理查兹（Evelleen Richards）注意到，即使是竞争对手的*进化*论，在挑战统治范式时，也很难得到倾听。

进化论者和科学历史学家埃芙琳·理查兹（Evelleen Richards）注意到，即使是竞争对手的*进化*论，在挑战统治范式时也很难得到倾听——见[《科学》......现实检查。](https://creation.com/science-a-reality-check) 这应该让我们对圣经创造论者所面临的困难有所了解。

但是，我们难道没有读到，甚至在日报上，关于许多似乎只支持大爆炸的“观察”吗？事实上，这些著名的世俗科学家说：

“即使是观测结果现在也通过这个有偏见的过滤器来解释，根据它们是否支持大爆炸来判断对错。因此，关于红移，锂和氦丰度以及星系分布等主题的不一致数据被忽略或嘲笑。

科学是人类的一个奇妙的工具，但它需要被理解，而不是被崇拜。它是易错的，不断变化的，并且在它可以和不能决定什么方面受到严重限制。正如CMI经常指出的那样，大爆炸思想与其说是一个科学概念，不如说是一个教条式的宗教概念——基于人文主义的宗教1。正如这些大爆炸的反对者所指出的：

“只支持大爆炸框架内的项目会破坏科学方法的一个基本要素——不断用观察来检验理论。这样的限制使得无偏见的讨论和研究变得不可能。

此外，与许多应该更了解的人的幼稚声明相反，这在任何意义上都不是“看着望远镜和”看到“的问题吗？数十亿年前的大爆炸。与往常一样，观察结果通过世界观镜头进行解释和过滤。那些开发大爆炸的人受到世俗世界观过滤器的引导，就像那些现在哭泣皇帝没有衣服的人一样。他们想要一个创造自己的宇宙;他们的对手想要一个永恒的、未被创造的宇宙。从基督徒的角度来看，两者都公开蔑视造物主对真实发生的事情的描述。

随着达尔文主义的流亡，灵魂的敌人正试图引诱信徒接受一种更微妙，但更致命的方式来逃避圣经的权威。随着渐进式神创论/大爆炸在福音派社区中肆虐，他一定认为自己是赢家。

为了有力、深刻地阐述这个涉及的所有问题，今天最重要的福音派妥协立场，我的同事[乔纳森·萨法蒂博士](https://creation.com/dr-jonathan-d-sarfati)刚刚出版的《[*驳斥妥协》*](https://creation.com/store_redirect.php?sku=10-2-575)一书不仅仅是一个“进一步阅读”的随意建议。第5章对大爆炸进行了挖掘，展示了它如何成为一种统治范式，由错误的逻辑支持，忽略了许多科学问题——其中一些问题被上述反对大爆炸的进化宇宙学家的来信所证实。它还展示了如何在不需要大爆炸的情况下使用[“第一原因”论证](https://creation.com/if-god-created-the-universe-then-who-created-god)。事实上，这本书注定要成为基督教的经典之作，一个改变文化的“切开烟幕”清晰和逻辑的庞然大物。我敦促所有正在阅读本文的人获得[*驳斥妥协*](https://creation.com/store_redirect.php?sku=10-2-575)，阅读它，借出它并广泛传播它。

**宇宙学危机随着大爆炸持不同政见者会议而继续**

作者 [：约翰·哈奈特](https://creation.com/dr-john-hartnett-bio)

图片 NASA， ESA， J. Hester（亚利桑那州立大学） 

2008年9月7日至11日，大约50名持不同政见的天文学家和物理学家在美国华盛顿安静的港口小镇安吉利斯港的红狮酒店会面。我就是其中之一。他们开会讨论宇宙结构和起源的“大爆炸”模型面临的问题，希望有一天能开发出一个强大的替代品，不受标准模型面临的问题的困扰。

这是2005年在葡萄牙开始的系列中的第二部。会议题为**“宇宙学危机2：对共识宇宙学的挑战和对宇宙新图景的追求”。**

几十名感兴趣的观察员和当地媒体也出席了会议。

值得注意的是，这次会议恰逢日内瓦欧洲核子研究中心大型强子对撞机（LHC）投入使用，记者1询问了大型强子对撞机重现早期大爆炸宇宙的一些初始条件的可能性。正如经常报道的那样，大型强子对撞机可能会产生迷你黑洞2并将地球吸入尾迹，因此时机似乎很完美。[但请参阅： [我们关于大型强子对撞机炒作的文章](https://creation.com/the-large-hadron-collider-lhc-will-a-black-hole-swallow-us)——编辑]。

“大爆炸”理论是一堆薄纸，即将在自身的重量下坍塌——非创造论物理学家大卫·迪尔沃思（David Dilworth）

来自会议的科学家告诉记者，这些问题几乎不适用，因为宇宙的“大爆炸”起源是一个*神话* - 它从未发生过。《*半岛新闻日报*》引述如下：

物理学家大卫·迪尔沃思（David Dilworth）说：“大爆炸”理论是一堆薄纸，即将在自身的重量下坍塌。

和

“宇宙学研究宇宙的自然秩序。范弗兰德说，一个“好的宇宙学”可以解释宇宙是如何运作的，但不一定能解释它的起源。“大爆炸”理论确实依赖于未经证实的想法。

在那篇文章中，范弗兰德继续说，与会者之间已经达成了一定程度的协议。我实际上对此表示异议，除非它指的是这样一个事实，即唯一的共识是，与我们观察到的相比，“大爆炸”是一个糟糕的描述。会议的共同点是需要更好的东西。而且有很多情感——似乎每个人都有自己的宇宙观，而且大多数人也是无神论者。

图像ESA和数字化巡天（加州理工学院） 

大多数参加会议的人都请假或自营职业。只有大约八人正式代表他们自己的大学——包括我自己。许多其他人被邀请，但害怕参加，害怕被贴上与这个团体有联系的标签。

几年前，该小组以发表在《新科学家》上的一般使命宣言“公开信”4开始了替代宇宙学小组3，并概述了标准LCDM（冷暗物质）“大爆炸”宇宙学的许多主要问题。

最初只有少数人签署了这封信，但当网站上升时，名单增加到300多人，其中许多人来自知名大学。

在介绍性评论中，引用彼得贝克曼的话说：“他凝视着阻挡光线的巨人。这是在艾萨克·牛顿爵士（Sir Isaac Newton）的背景下，他在谈到他的科学进步时说：“站在巨人的肩膀上，我看得更远”——那些以前走过的人。显然，他们感到标准模式的主导地位现在扼杀了新的想法——一种控制他们必须如何思考的独裁统治。

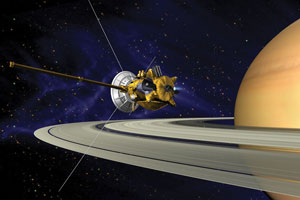
他们觉得标准模式的主导地位现在扼杀了新的想法——一个控制他们必须如何思考的独裁统治。

我问了几位与会者，他们不喜欢“大爆炸”的原因是什么。例如，如果发现它可以在不引入捏造因素的情况下解释观测数据，你会接受吗？一位参与者告诉我，“对我来说，这是哲学上的。另一个人说他 *相信* 宇宙是静态的。另一个人说他不 *相信* “大爆炸”，因为它开始于时间，那一定是一个奇迹。（它最终总是是一个信仰问题——一个世界观。

MetaResearch Institute的Tom van Flandern提出了他对一个好模型的要求。他们包括一定不能有奇迹。他几乎每天都强调这一点，仿佛他觉得如果他说得足够频繁，别人最终会相信他。有些人不接受这个条件（包括我），但对于那些不接受的人来说，这似乎不是因为他们相信奇迹，而是因为他们相信宇宙本身可以从“虚无”中创造物质，即虚*无*创造。

范弗兰德非常教条，不教条。他坚信自己对一个静态无限永恒的平坦宇宙的信念。他非常有力地表达了自己的观点，排除了所有其他人。

我介绍了我在斯隆数字巡天（SDSS）和2度视场星系红移巡天（2dF GRS）确定的宇宙大规模周期结构上所做的工作。埃里克·勒纳（Eric Lerner）评论说，我向他们展示的很可能是迄今为止发现的最大的单一空间结构——直径为10亿光年。我认为这很可能表明我们的银河系在宇宙学上靠近物理宇宙的中心 - 无论如何我们都可以看到。

图片 美国宇航局/喷气推进实验室 

勒纳提出了他对星系的托尔曼表面亮度测试的分析，作为红移（从z = 0.03到5.7）的函数，因此当我们越来越深入太空时，宇宙中的距离。他声称，这些数据只能适应一个静态的非膨胀宇宙。哈勃太空望远镜数据中氢云之间的分离研究也支持了这一点。它发现它们作为红移的函数具有恒定的分离。这当然与空间正在膨胀的概念相反，因此也与“大爆炸”相反。对于任何膨胀的宇宙模型来说，这也是一个问题。

与会者情绪激动，但意见不大。有时情绪如此强烈，以至于讨论变得激烈。但这些人充满激情，我相信最好是充满激情并寻求更好的答案，而不是被动地接受有缺陷的模型。他们之间有揭露“大爆炸”的愿望，但他们真的不知道如何进行。这似乎又是大卫和歌利亚之间的战斗。

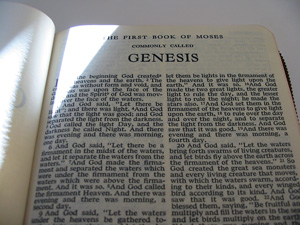
如前所述，虽然范弗兰德非常坦率地拒绝奇迹，但其他人并不一定同意。正如一个人告诉我的，假设他知道关于宇宙的所有已知信息。遗憾的是，这个才华横溢的团体如此反对造物主的概念，造物主告诉我们，他确实在大约六千年前以地球时钟测量的特定方式创造了宇宙。我们只能找出一些细节。

**创世记在新约中的应用**

作者 [：丽塔·桑德斯](https://creation.com/lita-sanders)

**发布时间： 2010年8月24日 （GMT+10）主页重新推荐： 2022年6月21日 （GMT+10）**

**这是出版前的版本，随后被修订为出现在 *创造33*** [**（2）：16-19中。**](https://creation.com/creation-magazine-332-contents)

照片 sxc.hu

经常有人问我，为什么专门研究新约的人会关心“旧约”的创造问题。毕竟，一个人对创世记第一章的看法在解释新约时充其量只是次要的。但我相信一个人对创世记的解释对许多在新约中教导得最清楚的教义都有影响。

首先，新约学者对创造的看法很重要，因为[创世记对新约作者很重要](https://creation.com/new-testament-creation)。 [每个新约作者都](https://creation.com/genesis-bible-authors-believed-it-to-be-history)引用或暗示创世记。新约总共有60处关于创世记[1-11](https://biblia.com/bible/esv/Gen%201%E2%80%9311)的典故，当我们扩大搜索范围以包括所有创世记时，这个数字增加到103个。对于如此小的文献，新约有惊人的数量可以追溯到创世记（见[下面的列表](https://creation.com/genesis-new-testament#NTreferences)）。

但是，仅仅列出对创世记的引用并不能证明什么——[我们必须看看 新约作者如何使用创世记](https://creation.com/quotations-in-the-new-testament-do-they-mean-that-the-quoted-book-is-totally-authoritative)来辨别他们的观点。压倒性地，它被认为是一份*历史*文献;唯一可以说它不一定在历史上使用的地方是借用启示录中的伊甸符号来描述新耶路撒冷（取决于一个人的末世论观点1）。但这是例外，无论如何，即使是象征性的使用也有潜在的字面现实——比喻性的“像牛一样强壮”将毫无意义，除非牛真的强壮，而对伊甸园天堂的暗示强调了这个没有诅咒的堕落前世界的现实。

**耶稣和福音书**

耶稣对创世记的使用为新约其余部分的使用定下了基调。他用它来解释教义和进行历史类比。前者的一个例子是在马太福音22：15-22  [（](https://biblia.com/bible/esv/Matt%2022.15%E2%80%9322)与马可福音12：13-17[和路加福音20](https://biblia.com/bible/esv/Mark%2012.13%E2%80%9317)：20-36[相似](https://biblia.com/bible/esv/Luke%2020.20%E2%80%9336)），法利赛人和希律党人向他询问税收问题。对耶稣来说，因为硬币上有凯撒的形象，所以它是凯撒的财产，应该交给他——但他增加了命令，要把上帝的东西交给上帝。在上下文中，硬币上的形象决定了谁拥有它，所以具体来说，这里看到的是上帝形象中的形象。耶稣指的是[创世记1：26-27：](https://biblia.com/bible/esv/Gen%201.26%E2%80%9327)

“现在，在上帝面前适当的谦卑要求支付罗马税，但如果一个人的一些钱确实应该归凯撒所有，那么更真实的是，一个人所需要的一切都交给上帝，上帝是按照他的形象创造的。阿拉伯数字

当然，如果人类实际上没有像创世记所教导的那样按照上帝的形象被造，整个先例就会分崩离析。

路加的家谱回到亚当，亚当被称为神的儿子（不是类人猿生物或池塘败类的儿子）。绝对没有证据表明路加认为最早的祖先比最近的祖先更不具有历史意义。

在耶穌的時代，有一個關於離婚是被允許以任何理由，還是只為了通姦而進行的辯論。当被要求权衡时，耶稣基本上超越了律法回到创造，并引用创[世记1：27和](https://biblia.com/bible/esv/Gen%201.27)2：24 来确定上帝创造了男人和女人，并打算在男人和女人之间终生结婚。这种忠诚的纽带超越了所有其他的忠诚，甚至对父母的忠诚，除了对上帝的忠诚。法利赛人问为什么摩西命令一个男人给他的妻子一张离婚证，把她送走。耶稣反驳说，摩西*允许*（从未命令过）离婚是因为悖逆（心硬）。但是离婚违背了上帝的旨意，这种旨意在被造的秩序本身中表达出来，甚至凌驾于律法之上。

创世记的这句话也揭示了耶稣对创造时间线的想法，因为他说“[从创造之初”就是](https://creation.com/but-from-the-beginning-of-the-institution-of-marriage)这样。如果耶稣说的时间尺度是从创造到他的日子的4000年，那么将第6天建立的东西称为“从创造之初”是有道理的。但是，如果人类在创造之前有数百万年，那么将其称为“创造的开始”是没有意义的。另见[耶稣论地球的年龄](https://creation.com/jesus-age-earth)。

耶稣常常把他那个时代的人比作创世记里的人。迦百农比所多玛更糟糕，因为耶稣说，如果所多玛人看到在迦百农行的神迹，他们会悔改的（[马太福音11：23-24](https://biblia.com/bible/esv/Matt%2011.23%E2%80%9324)）。耶稣将亚伯拉罕对他那一天的热切期望与拒绝自称是他后裔的法利赛人进行了对比（[约翰福音8：33-41](https://biblia.com/bible/esv/John%208.33%E2%80%9341)）——以及将亚伯拉罕的出现与他自己永恒的先存进行了对比（58节）。他预言末日将像挪亚和罗得的日子一样——毁灭将迅速而毫无征兆地到来（[路加福音17：26-29](https://biblia.com/bible/esv/Luke%2017.26%E2%80%9329)）。在每一种情况下，都没有迹象表明耶稣以不那么历史的方式对待这些事件。

路加是一位完美的历史学家，他的福音书给了我们比其他任何福音书更精确的时间细节。路加认为耶稣的生平和事奉植根于历史。虽然马太的家谱强调耶稣的犹太人身份和他对大卫宝座的要求，但路加的家谱（路加福音[3](https://biblia.com/bible/esv/Luke%203)）可以追溯到更远的亚当，他被称为神的儿子（*不是*类人猿生物或池塘败类的儿子）。绝对没有证据表明路加认为最早的祖先比最近的祖先更不具有历史意义;他在家谱中将亚当和亚伯拉罕包括在内，肯定了这些人物的历史性，并确定了基督与全人类有关。3 有趣的是，“最具历史意义”的福音书4 对创世记的引用最多。

约翰福音是最公开的“神学”，因为他自由地插入了自己对他所记录的事件意义的评论。他没有像路加和马太那样的出生叙事，而是回到[创造开始](https://creation.com/john-the-creation-evangelist)他的福音。“在1：1-5中，约翰追溯他对耶稣的记载比事奉的开始更远，比童贞女所生更远，甚至比创造更久远。这个叙述必须追溯到永恒的、神圣的话语，上帝在创造中的代理人，生命和光的源泉。5 约翰的开场白“起初”明显是指创世记开头的经文，6 但天地的创造只出现在约翰福音第3节。要理解耶稣的使命，我们必须了解他的身份，对约翰来说，他不亚于起初与父同在的神圣话语。

**最早的教会讲道**

当使徒和最早的基督徒向没有任何犹太圣经背景的外邦人传道时，他们回到创造界，作为他们传讲和宣讲福音的基础。

当使徒和最早的基督徒向犹太听众讲道时，他们从犹太圣经的基础开始讲道;犹太历史以及亚伯拉罕和大卫的应许是突出的（[使徒行传2：14-41](https://biblia.com/bible/esv/Acts%202.14%E2%80%9341); [7：2-14](https://biblia.com/bible/esv/Acts%207.2%E2%80%9314)）。但是当他们向犹太圣经中没有这种背景的外邦人传道时，他们又回到了创造界，作为他们传道的基础（[使徒行传14：15-17](https://biblia.com/bible/esv/Acts%2014.15%E2%80%9317); [17：24-31](https://biblia.com/bible/esv/Acts%2017.24%E2%80%9331)）。他们认为创造和所有人从亚当的祖先是历史性的（26节），这是他们宣讲福音的基础。

**罗马书**

创造和堕落被编织到罗马书的整个神学中。上帝的能力是通过创造显明出来的，人被定罪是因为他们不承认这一点（[罗马书1：19-20](https://biblia.com/bible/esv/Rom%201.19%E2%80%9320)）。外邦人因偶像崇拜和不道德而被定罪，犹太人因未能完全遵守律法而被定罪，律法总是只是为了增加过犯，而不是拯救。保罗描绘了一幅极其黯淡的画面，他能够将其与基督的好消息进行对比：“现在，除了律法之外，从神而来的义已经显明，律法和先知都为之作见证。这从神而来的义，是因信耶稣基督而来的“（[罗马书3：21-22](https://biblia.com/bible/esv/Rom%203.21%E2%80%9322)）。保罗解释说，耶稣是为罪赎罪的祭。但是，当保罗解释一个人的牺牲如何使许多人成为义人时，[他又回到了创世记](https://creation.com/romans-5-pauls-literal-adam)，并解释了既然死亡是通过亚当而来的，那么公义的恩赐也应该通过一个人，基督而来（5：12-21）。

这种比较对于辨别保罗使用创世记非常重要，因为“保罗不是简单地将亚当与基督进行比较，而是将亚当的行为对人类的影响与基督的行为相提并论。7 但保罗并没有*比较*这两种行为，而是*对比*这两种行为;“这不是要比较完全平等，而是一种突出不当行为和善行及其影响的方式。8 保羅認為，這兩個人的行為影響了所有後來的人——亞當的罪影響了所有屬於他後裔的人，基督的順服影響了所有相信他的人。但只有历史人物和历史行为才能产生现实世界的后果。一个神话中的亚当，他的不顺服只是人类罪恶的寓言，不可能是一种基督。另见[罗马书5：12-21：保罗对字面亚当的看法](https://creation.com/romans-5-pauls-literal-adam)。

在[罗马书8](https://creation.com/cosmic-and-universal-death-from-adams-fall-an-exegesis-of-romans-819-23a)中，保罗教导说，不仅人类，而且所有的受造物都因为人的罪而徒劳无功，并等待从腐朽的束缚中解脱出来（19-22）。罗马书的注释家，无论他们对创世记的看法如何，都同意保罗相信是上帝在堕落时使创造物徒劳无功。参见[亚当堕落的宇宙和普遍死亡：罗马书8：19-23a的解释](https://creation.com/cosmic-and-universal-death-from-adams-fall-an-exegesis-of-romans-819-23a)。

**哥林多前书1和2**

写给哥林多教会的书信是保罗在写给外邦教会时如何使用圣经的好例子。毫不奇怪，保罗多次提到被造的秩序。哥林多信徒要避免性不道德，因为将基督身体的一部分与结合是不合适的（[哥林多前书6：12-20](https://biblia.com/bible/esv/1%20Cor%206.12%E2%80%9320)）。他唯一引用圣经来支持他的论点是引用 [创世记2：24](https://biblia.com/bible/esv/Gen%202.24)。关于敬拜中戴头巾的问题，显然与创造无关，保罗引用了被造的秩序——男人先被造，然后是女人——来捍卫他的裁决，即男人应该蒙着头祷告和预言，女人9应该蒙着头祷告和预言。

[在[罗马书5](https://biblia.com/bible/esv/Rom%205)中，]保罗认为这两个人的行为方式影响了所有后来的人——亚当的罪影响了所有他的后裔，基督的顺服影响了所有相信他的人。但只有历史人物和历史行为才能产生现实世界的后果。

但毫无疑问，保罗对创世记最重要的使用是在[哥林多前书15](https://biblia.com/bible/esv/1%20Cor%2015)章，保罗为死人的肉体复活辩护。10 他的论点，就像他在罗马书5：12-21[中的论点一样，](https://biblia.com/bible/esv/Rom%205.12%E2%80%9321)是亚当和基督构成人类的两个元首。死亡因亚当的罪而来，但复活是通过基督来的。因为信徒在基督之下，信徒也会复活。因为基督*作为一个人*复活了，我们可以肯定我们的复活会像他的一样;这不是因为他的神性而复活的另一种。同样，据说人类的状态源于实际人的历史行为，这些行为实际上影响了后来者。保罗用这种论点来捍卫基督教信仰的一个基本教条，复活[，](https://creation.com/the-resurrection-and-genesis)没有复活，保罗说我们没有盼望！

**其他保罗信件**

保罗的其他书信中散布着对创世记的引用;绝大多数是创造和上帝作为创造者的现实。這在各種情況下都得到重申，實際上對教會如何行事有影響。

**希伯来 书**

希伯来书是写给犹太基督徒的，他们面临着放弃信仰和回归犹太教的社会压力。作者的观点是，用基督换取社会的认可会产生灾难性的*永恒*后果。毫不奇怪，作者提到了犹太基督徒会很熟悉的旧约经文;只有路加福音更多地提到创世记，没有新约书卷对创世记[1-11有更多的引用](https://biblia.com/bible/esv/Gen%201%E2%80%9311)。

[希伯来书11章将](https://biblia.com/bible/esv/Heb%2011)创世记1-11[章中的亚伯、以诺和挪亚列为](https://biblia.com/bible/esv/Gen%201%E2%80%9311)信仰的英雄，却没有区分他们的历史不如名单上的其他成员。就像[路加福音3](https://biblia.com/bible/esv/Luke%203)章一样，作者从创世记1-11[章无缝地转到](https://biblia.com/bible/esv/Gen%201%E2%80%9311)  圣经的其余部分，没有丝毫暗示，“现在我们正在从寓言或神话转向历史。

坚持不懈的信徒所进入的安息与[上帝在第7天的安](https://creation.com/gods-rest-in-hebrews-4111)息以及应许给从埃及出来的希伯来人的安息相比较。

作者称耶稣为大祭司，在父面前为我们代求。但耶稣来自犹大支派，不是利未的祭司支派，当然也不是来自亚伦的血统，利未教团的所有大祭司都必须通过他来。作者堅持認為耶穌是新秩序的大祭司，這是由新律法帶來的。这是麦基洗德的命令——作者引用了创世记（14：18-20）中一个不起眼的人物，在[诗篇110：4](https://biblia.com/bible/esv/Ps%20110.4)中提到过一次），以证明耶稣作为大祭司的职分是正当的。

[希伯来书11章将](https://biblia.com/bible/esv/Heb%2011)创世记1-11[章中的亚伯、以诺和挪亚列为](https://biblia.com/bible/esv/Gen%201%E2%80%9311)信仰的英雄，却没有区分他们的历史不如名单上的其他成员。就像[路加福音3](https://biblia.com/bible/esv/Luke%203)章一样，作者从创世记1-11[章无缝地转到](https://biblia.com/bible/esv/Gen%201%E2%80%9311)  圣经的其余部分，没有丝毫暗示，“现在我们正在从寓言或神话转向历史。

**彼得**

彼得的书信也表明了对历史创世记的坚定信念。在彼得前书中，他肯定有八个人在方舟中得救，在彼得后书中，他说犯罪的天使被派往塔尔塔罗斯，与洪水密切相关，作为对地上不敬虔的审判，并在方舟中拯救挪亚和他的家人。他还肯定地球是由水形成的，并被水摧毁。

**犹大**

犹大被广泛认为非常接近彼得后书，这本一章的书有四处提到创世记。像彼得后书一样，他指的是犯罪的天使，但这一次它与所多玛和蛾摩拉的奇怪肉体密切相关。他也接受[创世记5](https://creation.com/biblical-chronogenealogies)章是一个没有空白的严格年代谱系，因为以诺是“亚当的第七个”。

**启示**

对启示录的解释是出了名的困难，末世的情景甚至是志同道合的基督徒之间争论的焦点。但是，虽然启示录可能会在解释上带来独特的困难，但它也给了我们一些关于创世记的重要参考。首先，有一个“非创造”的主题，因为地球正在被毁灭——圣经中的审判通常被描绘成创造的逆转，例如洪水在第2天将世界带回原状，在土地和水分离之前，所以土地再次完全被淹没;[耶利米书4：23暗示了](https://biblia.com/bible/esv/Jer%204.23)创世记1：2[中](https://biblia.com/bible/esv/Gen%201.2)非创造的状态——审判是如此严厉，以至于在上帝创造任何东西之前，最终的状态会像地球一样空虚。

但更重要的是，新耶路撒冷充满了伊甸园的意象——生命树、河流，以及上帝在新耶路撒冷印记中的持续存在，如果不是回归伊甸园，恢复被救赎的人类不受限制地接近上帝并与上帝相交。在新耶路撒冷不再有咒诅和罪恶——人类和受造物回到了未堕落的状态。

**结论**

这需要一本书的研究，以应有的深度检查所有新约参考文献，但这个简短的概述应该表明创世记的历史观点对新约的解释是多么重要。还应该注意的是，简单地引用创世记并不能给出全貌——有许多教义除了[它们在创世记中的基础](https://creation.com/new-testament-doctrines-and-the-creation-basis)之外毫无意义，除非人们假设这个基础，否则新约的许多教导是没有意义的。

**新约对创世记的引用**

这个列表通过暗示或引用创世记来显示新约的引用。用括号编号显示的条目显示了对[创世记 1-11 的引用](https://biblia.com/bible/esv/Gen%201%E2%80%9311)。

|  |  |  |
| --- | --- | --- |
| 1 | [马太福音 1：1-3](https://biblia.com/bible/esv/Matt%201.1%E2%80%933) | 耶稣的祖先 |
| 2 | [马太福音 2：18](https://biblia.com/bible/esv/Matt%202.18) | 瑞 秋 |
| 3 | [马太福音 3：8-9](https://biblia.com/bible/esv/Matt%203.8%E2%80%939) | 亚伯拉罕的孩子 |
| 4 | [马太福音 10：15](https://biblia.com/bible/esv/Matt%2010.15) | 所多玛和蛾摩拉 |
| 5 | [马太福音 11：23-24](https://biblia.com/bible/esv/Matt%2011.23%E2%80%9324) | 所多玛 |
| 6 | （1） [马太福音 19：4](https://biblia.com/bible/esv/Matt%2019.4) | 引用 [创世记 1：27](https://biblia.com/bible/esv/Gen%201.27) |
| 7 | （2） [马太福音 19：5](https://biblia.com/bible/esv/Matt%2019.5) | 引用 [创世记 2：24](https://biblia.com/bible/esv/Gen%202.24) |
| 8 | （3） [马太福音 22：21](https://biblia.com/bible/esv/Matt%2022.21) | 以上帝的形象行事的人 |
| 9 | [马太福音 22：31-2](https://biblia.com/bible/esv/Matt%2022.31%E2%80%932) | 亚伯拉罕、以撒和雅各的神 |
| 10 | （4） [马太福音 23：35](https://biblia.com/bible/esv/Matt%2023.35) | 正义的亚伯 |
| 11 | （5） [马太福音 24：37-39](https://biblia.com/bible/esv/Matt%2024.37%E2%80%9339) | 挪亚的日子 |
| 12 | （6） [马太福音 26：52](https://biblia.com/bible/esv/Matt%2026.52) | 拔剑者必死在剑下 |
| 13 | （7） [马可福音 10：6](https://biblia.com/bible/esv/Mark%2010.6) | 引用 [创世记 1：27](https://biblia.com/bible/esv/Gen%201.27) |
| 14 | （8） [马可福音 10：7](https://biblia.com/bible/esv/Mark%2010.7) | 引用 [创世记 2：24](https://biblia.com/bible/esv/Gen%202.24) |
| 15 | （9） [马可福音 12：17](https://biblia.com/bible/esv/Mark%2012.17) | 以上帝的形象行事的人 |
| 16 | [马可福音 12：26](https://biblia.com/bible/esv/Mark%2012.26) | 亚伯拉罕、以撒和雅各的神 |
| 17 | （10） [马可福音 13：19](https://biblia.com/bible/esv/Mark%2013.19) | 上帝创造了世界 |
| 18 | [路加福音 1：25](https://biblia.com/bible/esv/Luke%201.25) | 伊丽莎白的责备像瑞秋一样被带走 |
| 19 | [路加福音 1：48](https://biblia.com/bible/esv/Luke%201.48) | 马利亚将像利亚一样被称为有福的 |
| 20 | [路加福音 1：55](https://biblia.com/bible/esv/Luke%201.55) | 亚伯拉罕和他的后裔 |
| 21 | [路加福音 1：73](https://biblia.com/bible/esv/Luke%201.73) | 神对亚伯拉罕的誓言 |
| 22 | [路加福音 3：8](https://biblia.com/bible/esv/Luke%203.8) | 亚伯拉罕的子孙 |
| 23 | （11） [路加福音 3：29-37](https://biblia.com/bible/esv/Luke%203.29%E2%80%9337) | 耶稣是亚当的后裔 |
| 24 | [路加福音 10：12](https://biblia.com/bible/esv/Luke%2010.12) | 所多玛 |
| 25 | （12） [路加福音 10：19](https://biblia.com/bible/esv/Luke%2010.19) | 踩蛇 |
| 26 | （13） [路加福音 11：51](https://biblia.com/bible/esv/Luke%2011.51) | 亚伯是第一个被杀的先知 |
| 27 | [路加福音 13：16](https://biblia.com/bible/esv/Luke%2013.16) | 亚伯拉罕的女儿 |
| 28 | [路加福音 16：22-31](https://biblia.com/bible/esv/Luke%2016.22%E2%80%9331) | 亚伯拉罕 |
| 29 | （14） [路加福音 17：26-27](https://biblia.com/bible/esv/Luke%2017.26%E2%80%9327) | 挪亚的日子 |
| 30 | [路加福音 17：28-29](https://biblia.com/bible/esv/Luke%2017.28%E2%80%9329) | 拍品天数 |
| 31 | [路加福音 17：32](https://biblia.com/bible/esv/Luke%2017.32) | 罗得的妻子 |
| 32 | （15） [路加福音 20：25](https://biblia.com/bible/esv/Luke%2020.25) | 以上帝的形象行事的人 |
| 33 | [路加福音 20：37](https://biblia.com/bible/esv/Luke%2020.37) | 亚伯拉罕、以撒和雅各的神 |
| 34 | （16） [约翰福音 1：1-3](https://biblia.com/bible/esv/John%201.1%E2%80%933) | 上帝预先存在并被创造 |
| 35 | [约翰福音 1：51](https://biblia.com/bible/esv/John%201.51) | 参考雅各的梯子 |
| 36 | [约翰福音 4：5-6](https://biblia.com/bible/esv/John%204.5%E2%80%936)， [11-12](https://biblia.com/bible/esv/John%204.11%E2%80%9312) | 雅各布的井 |
| 37 | [约翰福音 7：22](https://biblia.com/bible/esv/John%207.22) | 割礼来自族长 |
| 38 | [约翰福音 8：33](https://biblia.com/bible/esv/John%208.33) | 犹太人是亚伯拉罕的后裔 |
| 39 | （17） [约翰福音 8：44](https://biblia.com/bible/esv/John%208.44) | 魔鬼是骗子和杀人犯 |
| 40 | [使徒行传 7：2-14](https://biblia.com/bible/esv/Acts%207.2%E2%80%9314) | 亚伯拉罕、以撒、雅各和约瑟的历史 |
| 41 | （18） [使徒行传 14：15](https://biblia.com/bible/esv/Acts%2014.15) | 上帝创造了天地和其中的一切 |
| 42 | （19） [使徒行传 15：20](https://biblia.com/bible/esv/Acts%2015.20)， [29](https://biblia.com/bible/esv/Acts%2015.29) | 可能提及诺亚之约 |
| 43 | （20） [使徒行传 17：24](https://biblia.com/bible/esv/Acts%2017.24) | 上帝创造了地球和其中的一切 |
| 44 | （21） [使徒行传 17：26](https://biblia.com/bible/esv/Acts%2017.26) | 所有国家都是一个人的后裔 |
| 45 | （22） [罗马书 1：19-20](https://biblia.com/bible/esv/Rom%201.19%E2%80%9320) | 上帝通过创造彰显大能 |
| 46 | [罗马书 4：1-25](https://biblia.com/bible/esv/Rom%204.1%E2%80%9325) | 亚伯拉罕因信称义 |
| 47 | （23） [罗马书 5：12-21](https://biblia.com/bible/esv/Rom%205.12%E2%80%9321) | 死亡因亚当的罪而来 |
| 48 | （24） [罗马书 8：20-23](https://biblia.com/bible/esv/Rom%208.20%E2%80%9323) | 整个创造被诅咒 |
| 49 | [罗马书 9：7-13](https://biblia.com/bible/esv/Rom%209.7%E2%80%9313) | 神拣选了亚伯拉罕、以撒和雅各 |
| 50 | [罗马书 15：8](https://biblia.com/bible/esv/Rom%2015.8) | 基督履行对族长的应许 |
| 51 | （25） [罗马书 16：20](https://biblia.com/bible/esv/Rom%2016.20) | 撒旦被压在信徒的脚下 |
| 52 | （26） [哥林多前书 6：16](https://biblia.com/bible/esv/1%20Cor%206.16) | 创世记 2：24 [的引述](https://biblia.com/bible/esv/Gen%202.24) |
| 53 | （27） [哥林多前书 11：7-8](https://biblia.com/bible/esv/1%20Cor%2011.7%E2%80%938) | 按照上帝的形象塑造男人，在男人之后创造的女人 |
| 54 | （28） [哥林多前书 15：21-22](https://biblia.com/bible/esv/1%20Cor%2015.21%E2%80%9322) | 死亡通过亚当而来 |
| 55 | （29） [哥林多前书 15：38](https://biblia.com/bible/esv/1%20Cor%2015.38) | 每种种子都有自己的身体 |
| 56 | （30） [哥林多前书 15：45](https://biblia.com/bible/esv/1%20Cor%2015.45) | 创世记2：7[的引述](https://biblia.com/bible/esv/Gen%202.7) |
| 57 | （31） [哥林多前书 15：47](https://biblia.com/bible/esv/1%20Cor%2015.47) | 第一个由尘土制成的人 |
| 58 | （32） [哥林多后书 4：6](https://biblia.com/bible/esv/2%20Cor%204.6) | 创世记 1：3 [的引述](https://biblia.com/bible/esv/Gen%201.3) |
| 59 | （33） [哥林多后书 11：3](https://biblia.com/bible/esv/2%20Cor%2011.3) | 夏娃被骗了 |
| 60 | [加拉太书 3：6](https://biblia.com/bible/esv/Gal%203.6) | 创世记 15：6 [的引述](https://biblia.com/bible/esv/Gen%2015.6) |
| 61 | [加拉太书 3：8](https://biblia.com/bible/esv/Gal%203.8) | [创12：3](https://biblia.com/bible/esv/Gen%2012.3); [18：18](https://biblia.com/bible/esv/Gen%2018.18); [22：18](https://biblia.com/bible/esv/Gen%2022.18) |
| 62 | [加拉太书 3：16](https://biblia.com/bible/esv/Gal%203.16) | [创12：7](https://biblia.com/bible/esv/Gen%2012.7); [13：15](https://biblia.com/bible/esv/Gen%2013.15); [24：7](https://biblia.com/bible/esv/Gen%2024.7) |
| 63 | （34） [加拉太书 4：4](https://biblia.com/bible/esv/Gal%204.4) | 女人的种子 |
| 64 | [加拉太书 4：22-30](https://biblia.com/bible/esv/Gal%204.22%E2%80%9330) | 亚伯拉罕的两个儿子 |
| 65 | （35） [以弗所书 3：9](https://biblia.com/bible/esv/Eph%203.9) | 上帝创造了万物 |
| 66 | （36） [以弗所书 5：31](https://biblia.com/bible/esv/Eph%205.31) | 创世记 2：24 [的引述](https://biblia.com/bible/esv/Gen%202.24) |
| 67 | （37） [歌罗西书 1：16](https://biblia.com/bible/esv/Col%201.16) | 万物都是子创造的 |
| 68 | （38） [歌罗西书 3：10](https://biblia.com/bible/esv/Col%203.10) | 造物主形象 |
| 69 | （39） [提摩太前书 2：13-14](https://biblia.com/bible/esv/1%20Tim%202.13%E2%80%9314) | 人类先创造 |
| 70 | （40） [提摩太前书 2：14](https://biblia.com/bible/esv/1%20Tim%202.14) | 女人被欺骗了 |
| 71 | （41） [提摩太前书 4：3-5](https://biblia.com/bible/esv/1%20Tim%204.3%E2%80%935) | 上帝创造了一切美好的事物 |
| 72 | （42） [希伯来书 1：10](https://biblia.com/bible/esv/Heb%201.10) | 上帝创造了天地 |
| 73 | （43） [希伯来书 4：3-4](https://biblia.com/bible/esv/Heb%204.3%E2%80%934) | 创世记2：2[的引述](https://biblia.com/bible/esv/Gen%202.2) |
| 74 | （44） [希伯来书 4：10](https://biblia.com/bible/esv/Heb%204.10) | 上帝安息了 |
| 75 | [希伯来书 5：1-10](https://biblia.com/bible/esv/Heb%205.1%E2%80%9310) | 麦基洗德勋章 |
| 76 | [希伯来书 6：13-14](https://biblia.com/bible/esv/Heb%206.13%E2%80%9314) | [创世记 22：17](https://biblia.com/bible/esv/Gen%2022.17) |
| 77 | [希伯来书 6：20-7：17](https://biblia.com/bible/esv/Heb%206.20%E2%80%937.17) | 麦基洗德勋章 |
| 78 | （45） [希伯来书 11：3](https://biblia.com/bible/esv/Heb%2011.3) | 由上帝的命令形成的宇宙 |
| 79 | （46） [希伯来书 11：4](https://biblia.com/bible/esv/Heb%2011.4) | 亚伯可接受的牺牲 |
| 80 | （47） [希伯来书 11：5](https://biblia.com/bible/esv/Heb%2011.5) | 以诺被带走 |
| 81 | （48） [希伯来书 11：7](https://biblia.com/bible/esv/Heb%2011.7) | 诺亚方舟 |
| 82 | [希伯来书 11：8-12](https://biblia.com/bible/esv/Heb%2011.8%E2%80%9312) | 亚伯拉罕 |
| 83 | [希伯来书 11：17-22](https://biblia.com/bible/esv/Heb%2011.17%E2%80%9322) | 亚伯拉罕牺牲以撒和亚伯拉罕的后裔 |
| 84 | [希伯来书 12：16-17](https://biblia.com/bible/esv/Heb%2012.16%E2%80%9317) | 无神的以扫 |
| 85 | （49） [希伯来书 12：24](https://biblia.com/bible/esv/Heb%2012.24) | 亚伯之血 |
| 86 | [雅各书 2：21-23](https://biblia.com/bible/esv/James%202.21%E2%80%9323) | 亚伯拉罕献祭以撒 |
| 87 | [彼得前书 3：6](https://biblia.com/bible/esv/1%20Pet%203.6) | 撒拉顺服亚伯拉罕 |
| 88 | （50） [彼得前书 3：20](https://biblia.com/bible/esv/1%20Pet%203.20) | 8 保存在方舟中 |
| 89 | （51） [彼得后书 2：4-5](https://biblia.com/bible/esv/2%20Pet%202.4%E2%80%935) | 上帝惩罚了犯罪的天使并拯救了挪亚 |
| 90 | [彼得后书 2：6-8](https://biblia.com/bible/esv/2%20Pet%202.6%E2%80%938) | 所多玛和蛾摩拉受到惩罚，罗得救 |
| 91 | （52） [彼得后书 3：5-6](https://biblia.com/bible/esv/2%20Pet%203.5%E2%80%936) | 由水形成并被水破坏的地球 |
| 92 | （53） [约翰一书 3：11-12](https://biblia.com/bible/esv/1%20John%203.11%E2%80%9312) | 该隐杀死了亚伯 |
| 93 | （54） [犹大书 6](https://biblia.com/bible/esv/Jude%206) | 不顺服的天使受到惩罚（指“上帝的儿子”？ |
| 94 | [犹大书 7](https://biblia.com/bible/esv/Jude%207) | 所多玛和蛾摩拉 |
| 95 | （55） [犹大书 11](https://biblia.com/bible/esv/Jude%2011) | 凯恩 |
| 96 | （56） [犹大书 14](https://biblia.com/bible/esv/Jude%2014) | 以诺第七章来自亚当 |
| 97 | （57） [启示录 4：3](https://biblia.com/bible/esv/Rev%204.3) | 彩虹环绕着天堂的宝座 |
| 98 | [启示录 5：5](https://biblia.com/bible/esv/Rev%205.5) | 犹大的狮子 |
| 99 | （58） [启示录 6：12-14](https://biblia.com/bible/esv/Rev%206.12%E2%80%9314) | “非创造”主题——太阳、月亮和星星 |
| 100 | [启示录 10：6](https://biblia.com/bible/esv/Rev%2010.6) | 上帝创造了天地和其中的一切 |
| 101 | [启示录 20：2](https://biblia.com/bible/esv/Rev%2020.2) | 魔鬼是古蛇 |
| 102 | （59） [启示录21](https://biblia.com/bible/esv/Rev%2021) | 新耶路撒冷—伊甸城 |
| 103 | （60） [启示录 22：1-6](https://biblia.com/bible/esv/Rev%2022.1%E2%80%936) | 生命之水之河和生命之树 |