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“Science without religion is lame, religion without science is blind.” (Albert Einstein)

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**Professor Graeme Clark,**  
bionic ear pioneer  
ISCAST patron



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*Thinking seriously about science is especially important for those thinking about the bigger questions of our existence. No organisation in Australia does it better than ISCAST.*

**Rev. Dr John Dickson,**  
founding director,  
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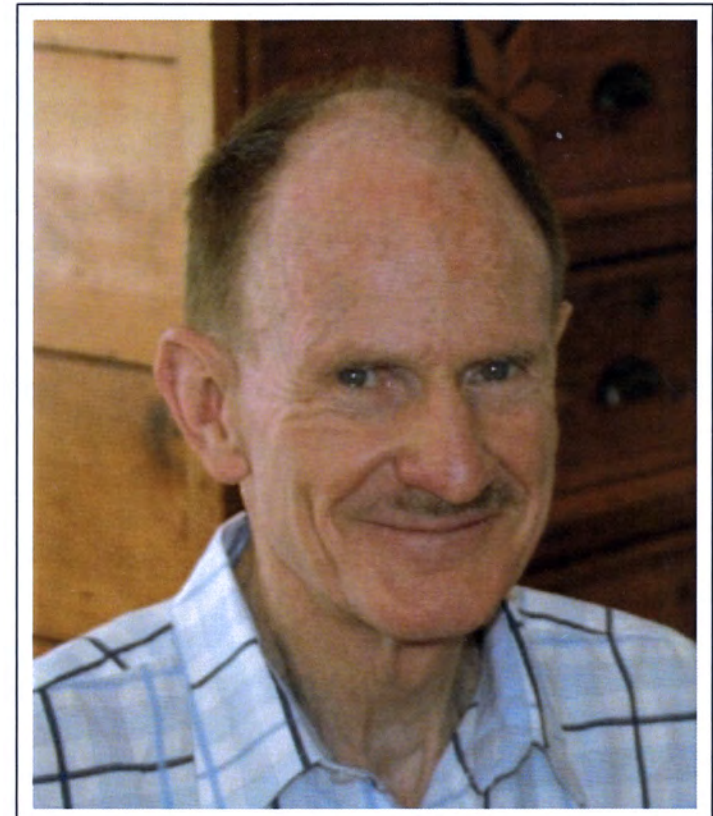






# **Tony Morgan Memorial Lecture on Science, Faith and Culture**

**UNSW  
1 October 2019**





# **The Big Bang, Stephen Hawking, and God**

**Professor Henry F. Schaefer III**

**Director, Center for Computational Quantum Chemistry**

**University of Georgia**

***ISCAST Tony Morgan Memorial Lecture***

**School of Physics**

**University of New South Wales**

**Sydney, Australia**

**October 1, 2019**

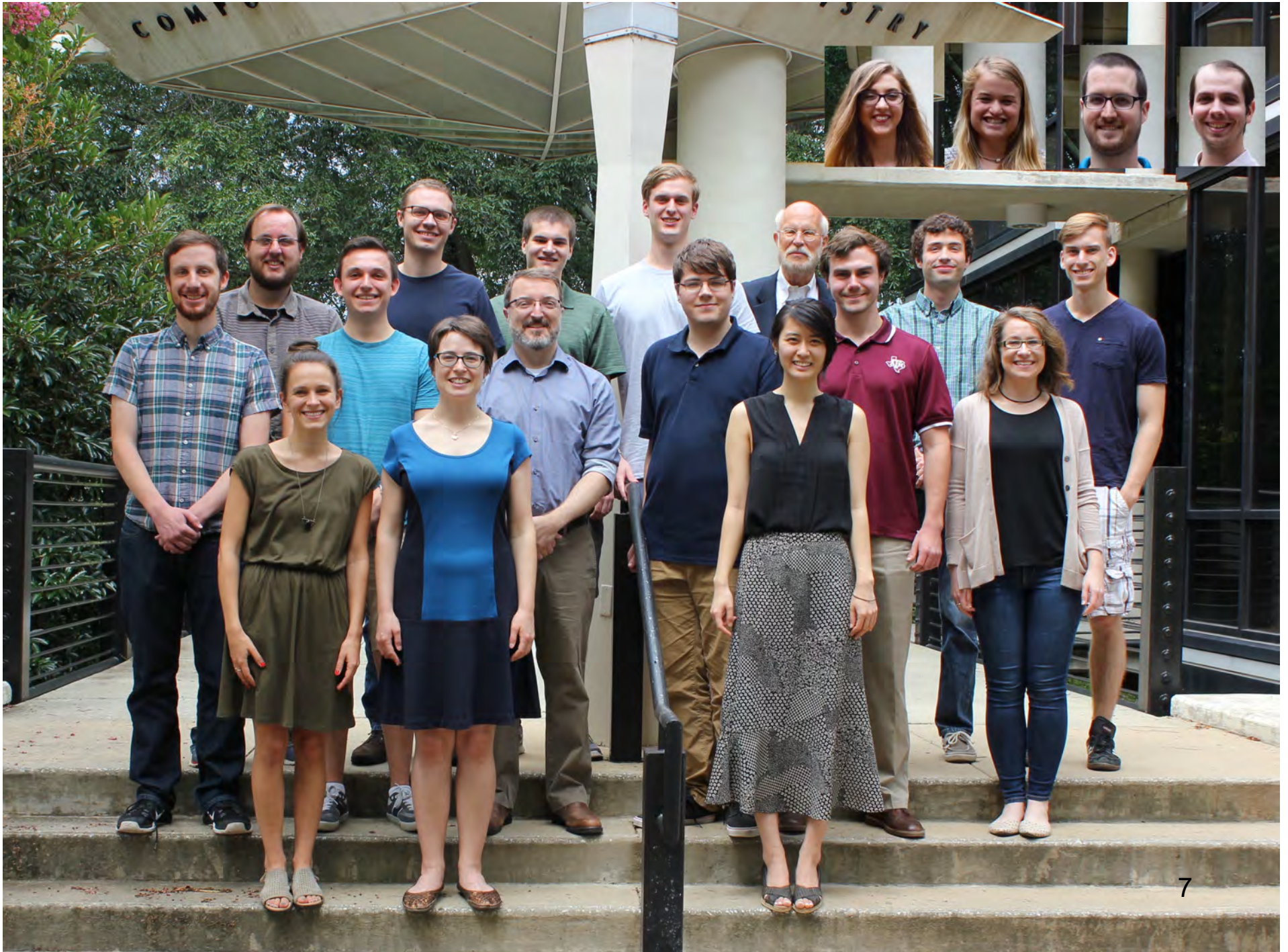


## Center for Computational Quantum Chemistry





# My Research Group



# **Worldview**

**Each individual has his or her own experiences and out of them forms his or her worldview. A carefully thought out worldview reflects the deep hunger among human beings for an overarching framework to bring unity to their lives.**



THE INTERNATIONAL WEEKLY JOURNAL OF SCIENCE

# nature

## LETTERS TO NATURE

### Theoretical Support for the Assignment of X-ogen to the $\text{HCO}^+$ Molecular Ion

THE first unidentified interstellar microwave line was reported in 1970 by Buhl and Snyder<sup>1</sup>, who, appropriately enough, named this line the X-ogen line. They were originally<sup>1</sup> able to detect X-ogen at  $89.190 \pm 0.002$  GHz in five galactic sources: W3 (OH), Orion, L134, Sgr A ( $\text{NH}_3\text{A}$ ) and W51. The first two candidates suggested for X-ogen were HNC and  $\text{HCO}^+$ , the former the suggestion of Herzberg (noted by Buhl and Snyder<sup>1</sup>) and the latter that of Klemperer<sup>2</sup>. Since then Snyder and Buhl<sup>3</sup> have concluded that a second unidentified line (at 90.665 GHz) is more likely to be due to HNC, and very recent *ab initio* calculations<sup>4</sup> have unquestionably ruled out HNC as a candidate for X-ogen.

Klemperer's proposed assignment was made by noting that the HC bond distance in HCN is 1.06 Å and the CO bond distance in  $\text{CO}^+$  is 1.115 Å. Assuming these same bond distances are valid for  $\text{HCO}^+$ , Klemperer predicted the  $J=0 \rightarrow 1$  pure rotational line to occur at 89.246 GHz, in very close agreement with X-ogen,  $89.190 \pm 0.002$  GHz. This is, however, not the only plausible choice of bond distances for  $\text{HCO}^+$ . For example, one might assume  $r_e(\text{CO})$  to be the same as in the isoelectronic CO molecule (1.128 Å), and take

$r_e(\text{HC})$  from the  $\text{CH}^+$  ion (1.131 Å). This second assumed geometry suggests that the  $J=0 \rightarrow 1$  transition of  $\text{HCO}^+$  could occur in the vicinity of 85.7 GHz, far from the X-ogen line. Generally, for any linear triatomic molecule, there will be a locus of pairs of bond distances which fit an observed rotational line. If we assume that X-ogen is  $\text{HCO}^+$  and the difference ( $B_e - B_0$ ) is the same for  $\text{HCO}^+$  as for the isoelectronic HCN molecule, then the  $B_e$  value of  $\text{HCO}^+$  is 44.785 GHz. Some points on the appropriate locus of acceptable linear geometries are seen in Table 1. Our chemical intuition (see also Sutton<sup>5</sup>) suggests that geometries outside this range are not very plausible. Shorter CO bond distances seem unlikely *per se*, and longer values of  $r_e(\text{CO})$  necessitate unreasonably small HC bond distances.

This year Buhl and Snyder<sup>4</sup> have reported four new galactic sources of the X-ogen emission line. Thus there is little question that X-ogen is an important interstellar species. In addition, Klemperer's hypothesis (that X-ogen is  $\text{HCO}^+$ ) has been taken quite seriously, in particular the implication that polyatomic molecular ions may play an important role in the chemistry of the interstellar medium<sup>6-11</sup>. For example, the existence of a substantial interstellar abundance of  $\text{H}_2\text{CN}^+$  could be used<sup>11</sup> to explain both the unexpected DCN/HCN ratio<sup>12</sup> of  $6 \times 10^{-3}$  and the formation of the HNC molecule.

ULF WAHLGREN  
BOWEN LIU

IBM Research Laboratory,  
Monterey and Cottle Roads,  
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PETER K. PEARSON  
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**Cosmology is the study of the universe as a whole – its structure, origin, and development.**

**The questions cosmology addresses are profound, both scientifically and philosophically.**

- **Is the universe finite or infinite in content and extent?**
- **Most important: Is the universe eternal, or did it have a beginning?**
- **Was it created?**
- **If not, how did it get here?**

- **If so, how was this creation accomplished and what can we learn about the agent and events of creation?**
- **Are such laws the products of chance, or something more profound?**
- **How do these laws relate to the support and development of life?**
- **Is there any existence, knowable existence, beyond the observed dimensions of the universe?**
- **Is the universe running down, irreversibly, or will it bounce back?**

**Hugh Ross, *The Fingerprint of God*.**



**The idea that the universe had a specific time of origin has been philosophically resisted by some highly distinguished scientists.**

**Arthur Eddington, who experimentally confirmed Einstein's general theory of relativity in 1919, stated in 1931:**

***“Philosophically, the notion of a beginning of the present order of Nature is repugnant to me. I should like to find a genuine loophole.”***

**Albert Einstein's reaction to the consequences of his own general theory of relativity appears to acknowledge the threat of an encounter with God. Through the equations of general relativity, we can trace the origin of the universe backward in time to some sort of a beginning. However, before publishing his cosmological inferences, Einstein introduced a cosmological constant, a "fudge factor," to yield a static model for the universe. Einstein later considered this to be the great blunder of his scientific career.**



**Einstein ultimately gave grudging acceptance to what he called "the necessity for a beginning" and eventually to "the presence of a superior reasoning power." But he never did accept the reality of a personal God.**

# **Five Arguments (Augustine, Aquinas) for the Existence of God**

- 1. The cosmological argument: the effect of the universe's existence must have a suitable cause.**



- 2 The teleological argument: the design of the universe implies a purpose or direction behind it.**
- 3 The rational argument: the operation of the universe, according to order and natural law, implies a mind behind it.**
- 4 The ontological argument: humankind's ideas of God (their God-consciousness) imply a God who imprinted such a consciousness.**
- 5 The moral argument: man's built-in sense of right and wrong can be accounted for only by an innate awareness of a code of law - an awareness implanted by a higher being.**

# **Why such strong resistance to the idea of a definite beginning of the universe?**

**The cosmological argument:**

- 1. Everything that begins to exist must have a cause.**
- 2. Now . . . . suppose the universe began to exist.**
- 3. Then, the universe must have a cause.**

**Robert Dicke (1965). An infinitely old universe “would relieve us of the necessity of understanding the origin of matter at any finite time in the past.”**

**“To deny the infinite duration of time would betray the very foundations of science.”**

**Walter Nernst (1864-1941)**

**Discoverer of the Third Law of Thermodynamics**

**The Big Bang a Christian Conspiracy?**

**“Fred Hoyle was equally scathing when it came to the Big Bang’s association with religion, condemning it as a model built on Judeo-Christian foundations.”**

**Simon Singh, *Big Bang*, 2004**



**“ The historical fact is that Christians believed in a beginning of time, while scientific materialists strongly preferred the idea of an ageless universe.”**

**Stephen M. Barr  
Professor of Physics  
University of Delaware**

**In 1946, George Gamov, a Russian-born American scientist, proposed that the primeval fireball, the “Big Bang,” was an intense concentration of pure energy.**

**It was the source of all the matter that now exists in our universe. The theory predicts that all the galaxies in the universe should be rushing away from each other at high speeds as a result of that initial Big Bang.**

**The 1965 observation of the microwave background radiation by Arno Penzias and Robert Wilson from the Bell Telephone Laboratories convinced most scientists of the validity of the Big Bang theory.**

**Further observations beginning in 1992 have moved the Big Bang theory from a consensus view to the nearly unanimous view among cosmologists: there was an origin to the universe approximately 13.7 billion years ago.**

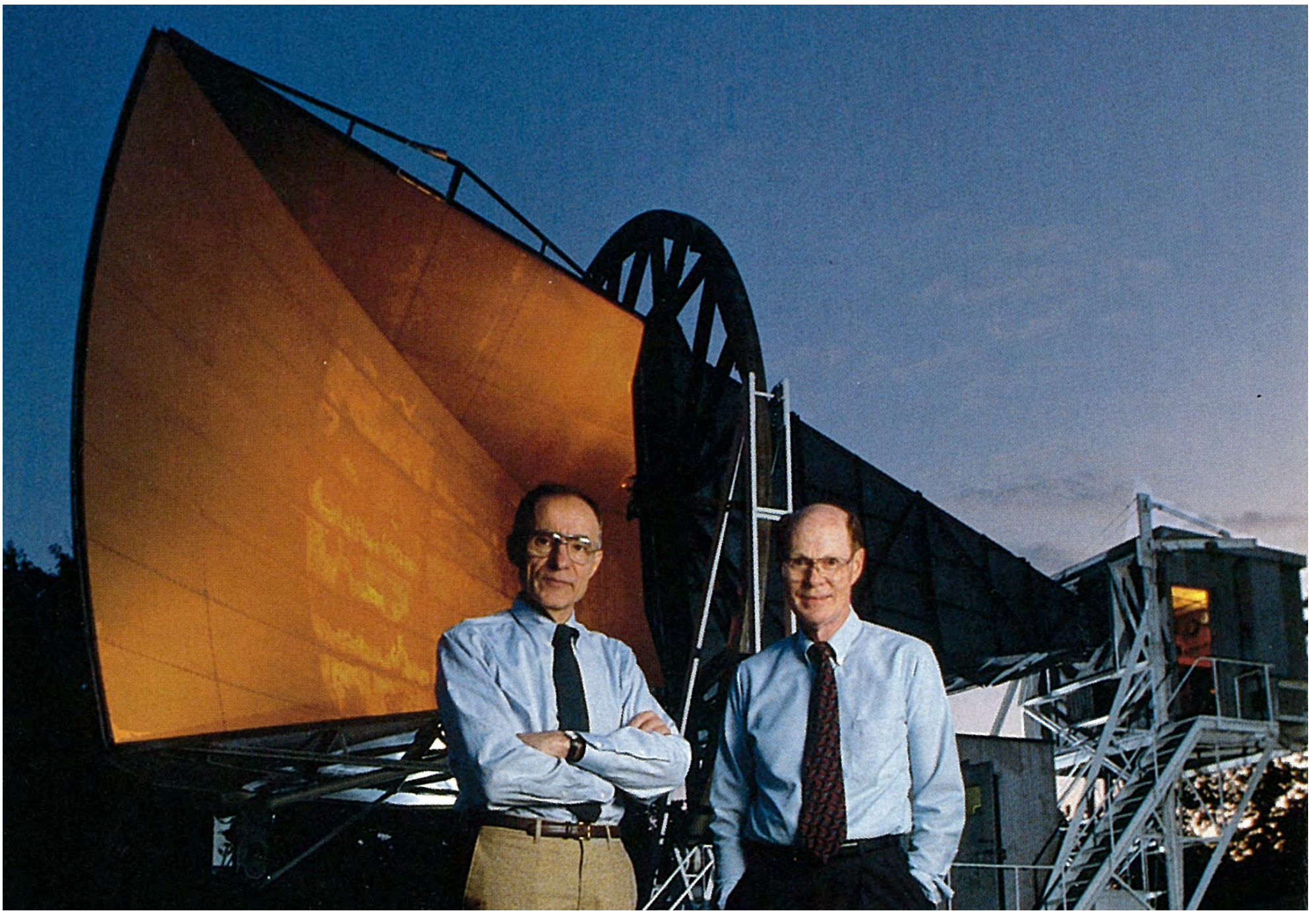
# **A Definition**

**The hot Big Bang theory states that the entire physical universe – all the matter and energy, and even the four dimensions of space and time – burst forth from a state of infinite or near infinite density, temperature, and pressure.**



**“ The best data we have  
(concerning the Big Bang)  
are exactly what I would have  
predicted, had I nothing to go on  
but the five books of Moses, the  
Psalms, the Bible as a whole.”**

**Arno A. Penzias  
March 12, 1978  
*New York Times***



**Arno Penzias & Robert Wilson**

**When later (1995) asked why some cosmologists were so affectionate in their embrace of an infinitely old universe, Nobelist Arno Penzias responded:**

**“Well some people are uncomfortable with the purposefully created world. To come up with things that contradict purpose, they tend to speculate about things they haven’t seen.”**

**In *Genius Talk*, by Denis Brian (Plenum, New York)**



**Statement by Dennis Sciama (Cambridge University), perhaps the most prominent advocate of the steady state theory of the universe; shortly after he gave up on the steady state hypothesis.**

**“The steady state theory has a sweep and beauty that for some unaccountable reason the architect of the universe appears to have overlooked.”**



**April 24, 1992**

**Announcement of the Big Bang ripples observed by  
the COBE satellite (NASA)**

***“It’s like looking at God.”***

**George Smoot, scientific team leader**

**Nobel Prize in Physics, 2006**

***“These findings now available make the idea that God  
created the universe a more respectable hypothesis  
today than at any time in the last 100 years.”***

**Science historian Frederick Bernham**

**One week later in the *Los Angeles Times***

# **Is The Big Bang Theory a Christian Conspiracy?**

**Geoffrey Burbidge (1925 – 2010) was one of the tiny number of scientists rejecting the COBE conclusions. To the end, Burbidge continued to believe the universe to be infinitely old. Burbidge discounted the new experiments as coming from “The First Church of Christ of the Big Bang.” Burbidge favored the steady state hypothesis, a view that he said supports Hinduism, not Christianity.**

**“There is no doubt that a parallel exists between the Big Bang as an event and the Christian notion of creation from nothing.”**

**George Smoot**  
***Wrinkles in Time***

**The Big Bang Ripples have been confirmed by more recent and continuing results from the Wilkinson Microwave Anisotropy Probe (WMAP).**

**“WMAP launched in 2001, and it has now mapped the temperature variations, or anisotropy, of the cosmic microwave background radiation over the full sky with unprecedented accuracy and precision.”**

**Charles L. Bennett  
John Hopkins University  
*Science Watch***



**“New Cosmic Microwave Background Results Strengthen the Case for Inflationary Big Bang Cosmology.”**

**Small departures from 2.725 degrees Kelvin fit the Big Bang model extremely well.**

**Bertram Schwarzchild**  
*Physics Today*

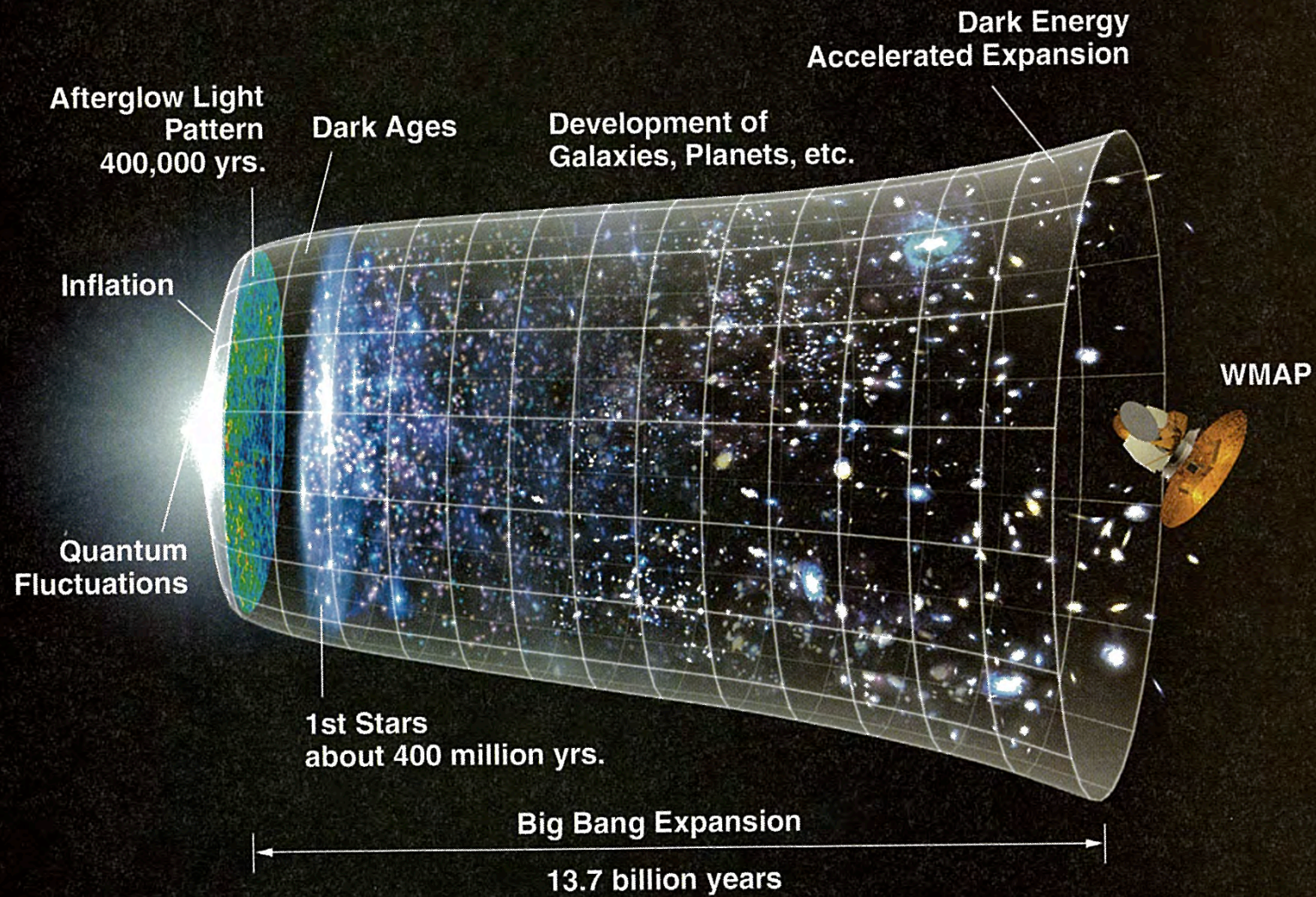
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**“Long-Awaited Data Sharpen Picture of Universe’s Birth.”**

**Adrian Cho**  
*Science*



# Timeline for a Universe



*Observations by NASA's WMAP probe support the theory that inflation preceded the Big Bang. Principal investigator Henry A. Rowland quipped, 'It appears that the infant universe had the kind of growth spurt that would alarm any mom or dad.'*



**By definition, time is that dimension in which cause and effect phenomena take place. No time, no cause and effect. Thus time's beginning is concurrent with the beginning of the universe, as the space-time theorem says. It follows that the cause of the universe must be some entity operating in a time dimension completely independent of and pre-existent to the time dimension of our cosmos.**

**This conclusion is powerfully important to our understanding of who God is and who or what God is not. It tells us that the Creator is transcendent, operating beyond the dimensional limits of the universe. It tells us that God is not the universe itself, nor is God contained within the universe.**

**Hugh Ross**

***The Creator and the Cosmos***



**Leon Lederman**

***The God Particle* (2006)**

**Nobel Prize in Physics, 1988**

**“In the very beginning there was a void – a curious form of vacuum – a nothingness containing no space, no time, no matter, no light, no sound. Yet the laws of nature were in place and this curious vacuum held potential. A story logically begins at the beginning. But this story is about the universe, and unfortunately there are no data for the very beginning.**

**None, zero!**

**We don't know anything about the universe until it reaches the mature age of a billionth of a trillionth of a second – that is, some very short time after the creation in the Big Bang. When you read or hear anything about the birth of the universe, someone is making it up. We are in the realm of philosophy. Only God knows what happened at the very beginning.”**

**Leon Lederman**  
***The God Particle***

**Stephen Hawking:**

**“ The actual point of creation lies outside the scope of the presently known laws of physics.”**

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**Professor Alan Guth (M.I.T.):**

**“ The instant of creation remains unexplained.”**





**Alan Guth**

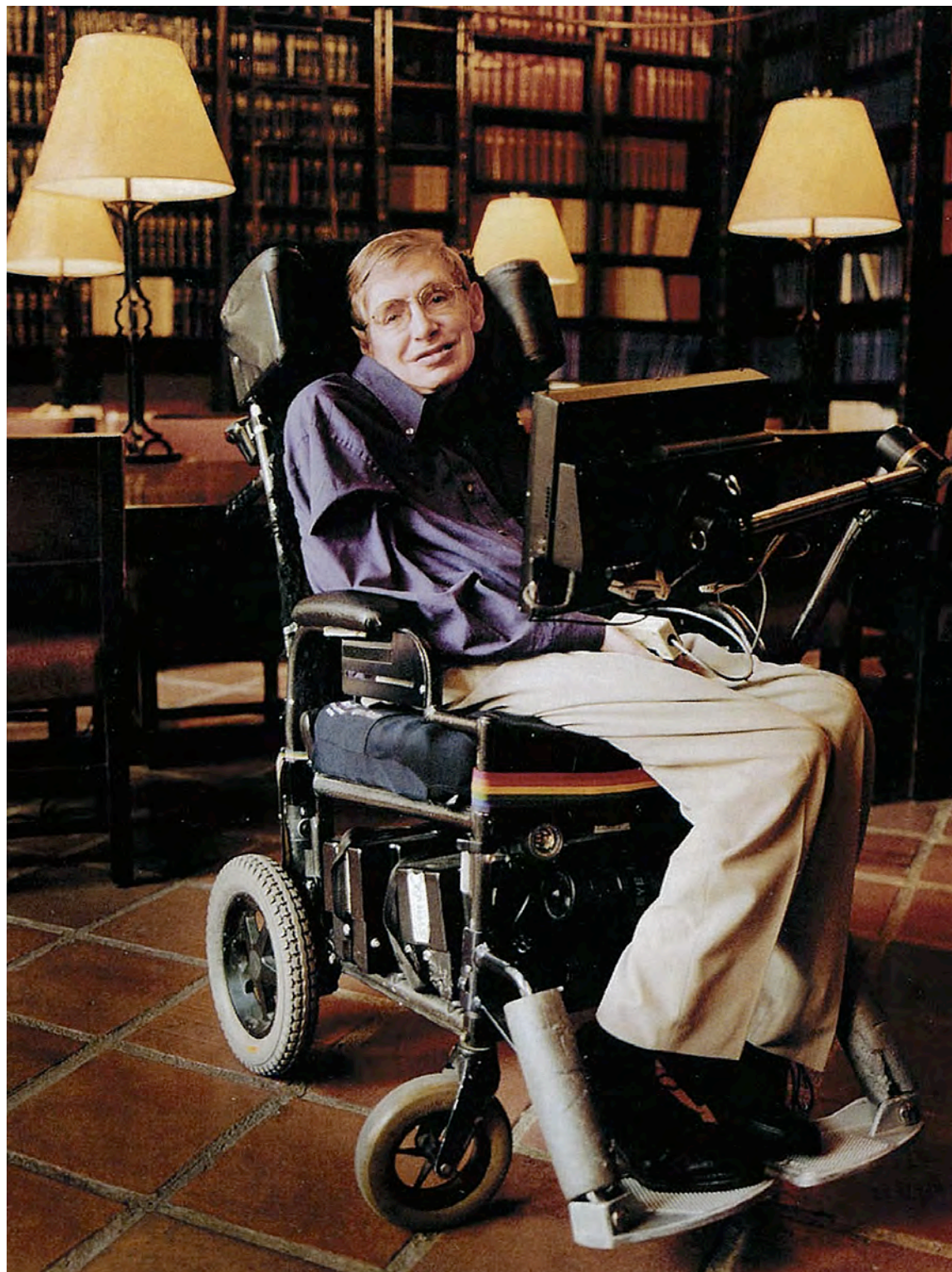
**At the time of his death**

**March 14, 2018**

**Stephen Hawking was the best known  
scientist in the world.**

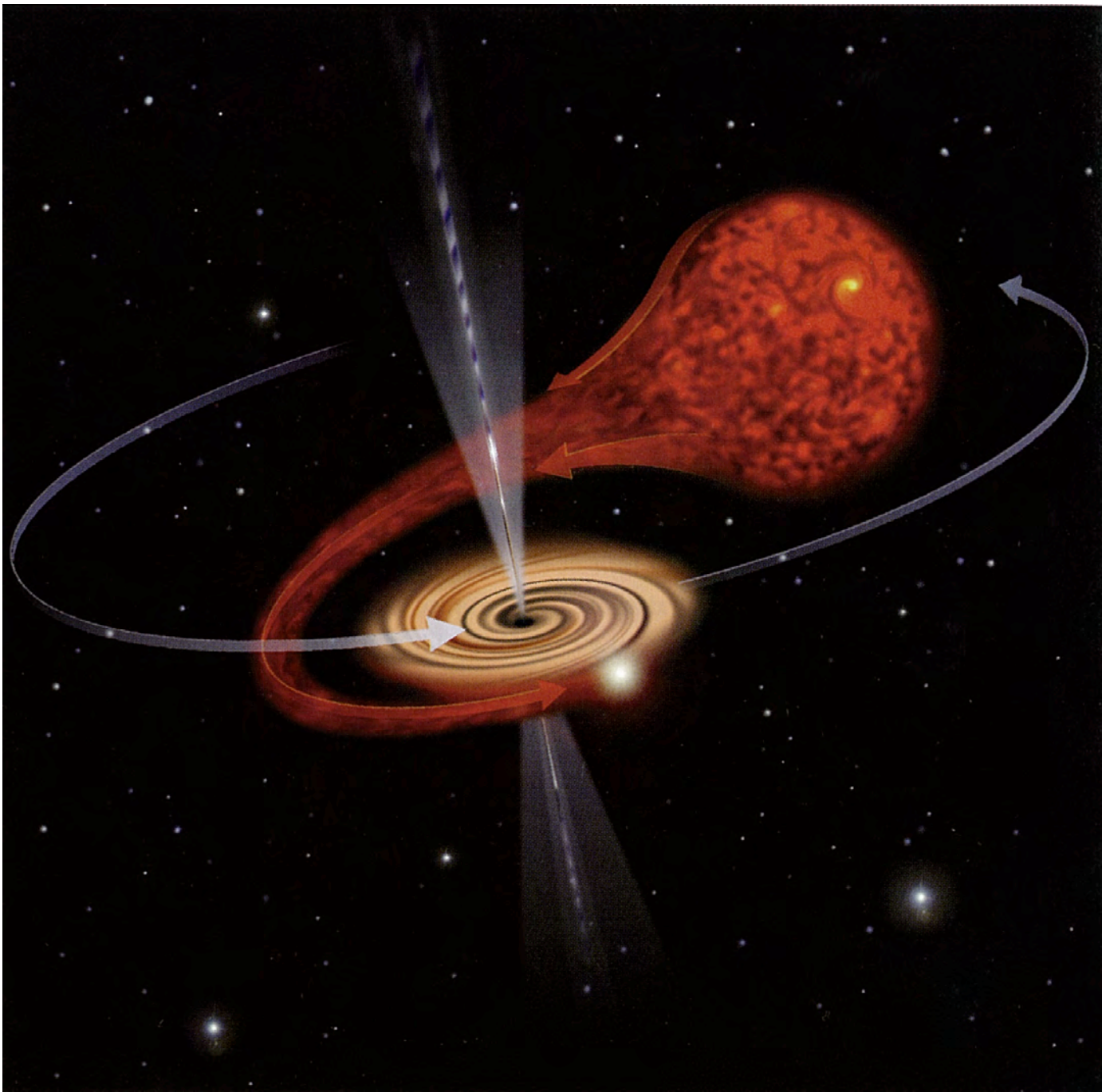
**His net worth was \$20 million, despite  
his staggering medical expenses,  
including round-the-clock professional  
care for 25 years.**





**Note first the 1968-1970 work of Roger Penrose, Stephen Hawking, and George Ellis. They demonstrated that every solution to the equations of general relativity guarantees the existence of a singular boundary for space and time in the past. This result is now known as the “singularity theorem.”**

**1974 – Quantum evaporation of black holes, exploding black holes. *Hawking Radiation***

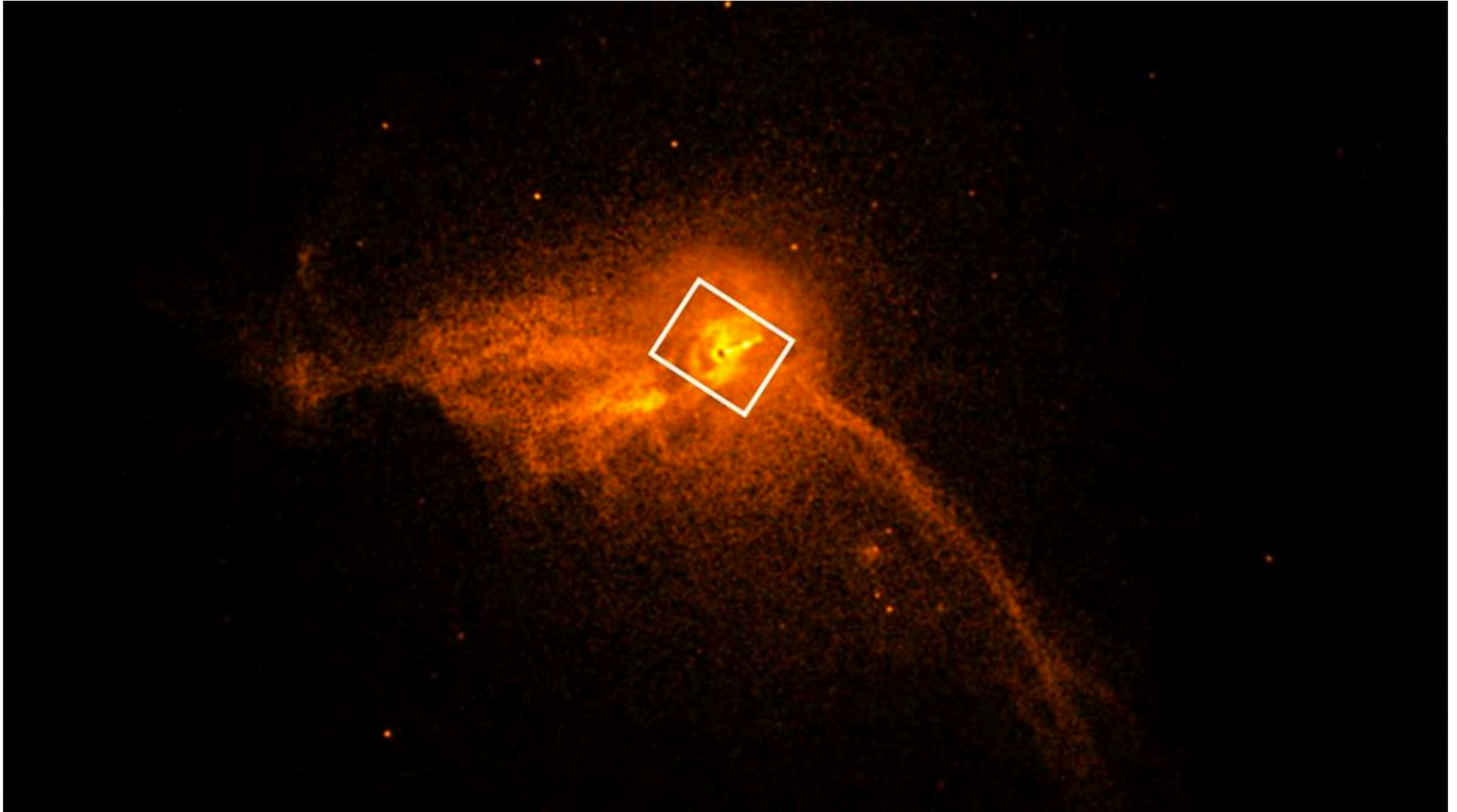


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**Black Hole Rips Matter from a Companion Star**



# The reason why the first-ever black hole photo was such a big deal



During April 2017, the Event Horizon Telescope project turned eight satellites towards a point in space. Scientists were trying to take a photo that would confirm years of speculation and theorizing. They were taking a picture of the now famous black hole at the centre of the Virgo A galaxy Messier 87.

**Stephen Hawking was surely the most famous physicist in history who did not win the Nobel Prize. This is because the Swedish Royal Academy demands that an award-winning discovery must be supported by verifiable experimental or observational evidence. Hawking's work remains unproved.**

**Although the mathematics of his theories is considered beautiful and elegant, science waited until 1994 for solid evidence for the existence of black holes. The verification of Hawking Radiation or any of his more radical theoretical proposals seems far off.**

**Even if some aspects of Hawking's research turns out to be wrong, he will have had a profound impact on the history of scientific thought.**



In 2014, Eddie Redmayne won the Best Actor Academy Award for his portrayal of Stephen Hawking in *The Theory of Everything*.







**Stephen Hawking and his first wife, Jane Wilde, pose with their actor counterparts, Eddie Redmayne and Felicity Jones.**

**On December 31, 1962, Stephen Hawking met Jane Wilde at a New Year's Eve party. One month later he was diagnosed with amyotrophic lateral sclerosis (ALS) and given two years to live. At this point Stephen was by all accounts an average performing graduate student at Cambridge University.**

**Let us turn to the 1992 biographers Michael White and John Gribbin this point:**

***“There is little doubt that Jane’s appearance on the scene was a major turning point in Hawking’s life. The two of them began to see a lot more of one another, and a strong relationship developed. It was finding Jane that enabled him to break out of his depression and regenerate some belief in his life and work.*”**

***For Hawking his engagement to Jane was probably the most important thing that had ever happened to him: it changed his life, gave him something to live for and made him determined to live. Without the help that Jane gave him, he almost certainly would not have been able to carry on, or had the will to do so.”***

**Stephen and Jane Hawking married in July, 1965.**





**July, 1965**



**Stephen Hawking:**

**“But what really made a difference was that I got engaged to a woman named Jane Wilde. This gave me something to live for.”**

**Jane Hawking (1987):**

**“Without my faith in God, I wouldn’t have been able to live in this situation. I wouldn’t have been able to marry Stephen in the first place, because I wouldn’t have had the optimism to carry me through, and I wouldn’t be able to carry on with it.”**

**The reason for Stephen Hawking's success as a *popularizer* of science is that he addresses the problems of meaning and purpose that concern all thinking people.**

**The book overlaps with Christian belief and does so deliberately, but graciously and without rancor. It is an important book and needs to be treated with respect and attention.**

## **Stephen Hawking Introduces the Main Character in *A Brief History of Time*.**

**“It is difficult to discuss the beginning of the universe without mentioning the concept of God. My work on the origin of the universe is on the borderline between science and religion, but I try to stay on the scientific side of the border. It is quite possible that God acts in ways that cannot be described by scientific laws.”**

**“I thought I had left the question of the existence of a Supreme Being completely open.....**

**It would be perfectly consistent with all we know to say that there was a Being who was responsible for all the laws of physics.”**

**Stephen Hawking**  
***The American Scientist***



**When asked whether Hawking believed that science and Christianity were competing philosophies, he replied “Then Newton would not have discovered the law of gravity.”**

***A Brief History of Time* makes intentionally ambiguous statements:**

**“Even if there is only one possible unified theory, it is just a set of rules and equations. What is it that breathes fire into the equations and makes a universe to describe them?”**

**“God not only plays dice. He sometimes throws them where they can’t be seen.”**

***“The idea that God might want to change his mind is an example of the fallacy, pointed out by St. Augustine, of imagining God as a being existing in time. Time is a property only of the universe that God created. Presumably, He knew what He intended when He set it up!”***

***Stephen Hawking  
A Brief History of Time***



**Zero Gravity (2007)**  
**Kennedy Space Center, Florida**

**Excepting his disability, Stephen Hawking  
had an adventurous life.**

**In his book *A Brief History of Time* and until about 2010, Stephen Hawking seemed friendly toward belief in God, even going to church occasionally with his first wife.**



**However, in September 24, 2014,  
while lecturing in the Canary  
Islands, Stephen Hawking stated  
that he had changed his mind.**

**His exact statement:**

**“I’m an atheist.”**

**Alan Guth showed that even if the universe contains enough mass to halt its current expansion, any ultimate collapse would end in a thud, not a bounce.**

**A. H. Guth and M. Sher, “The Impossibility of a Bouncing Universe”  
*Nature* 302, 505 (1983).**

**In early 1998, two observational research teams independently made the startling announcement that the expansion of the universe is accelerating (Saul Perlmutter, Berkeley; Brian Schmidt, Australian National University).**

**The prestigious journal *Science* named this finding the Discovery of the Year for 1998.**

**Nobel Prize Physics 2014**

***Indeed, contrary to popular myth, scientists appear to have the same range of attitudes about religious matters, as does the general public.***

**Alan Lightman, M.I.T. Professor  
Origins: the Lives and Worlds  
of Modern Cosmologists  
(Harvard University Press)**

***“In my view the question of origin seems always left unanswered if we explore from a scientific view alone. Thus, I believe there is a need for some religious or metaphysical explanation. I believe in the concept of God and in His existence.”***

**Charles H. Townes  
Professor of Physics, Berkeley  
Nobel Prize in Physics, 1964  
Discovery of the laser**

**See also C. H. Townes *Making Waves* (American Institute of Physics, 1995), especially the last chapter “Spiritual Views from a Scientific Base.”**



**“We are fortunate to have the Bible, and especially the New Testament, which tells us so much about God in widely accessible human terms.”**

**Arthur L. Schawlow  
Professor of Physics  
Stanford University  
Nobel Prize in Physics, 1981**

**Identified himself as a Protestant Christian**

**“God’s nature is revealed most perfectly in the life and teachings of Jesus of Nazareth as recorded in the New Testament.”**

**George Ellis  
Professor of Applied Mathematics  
University of Cape Town  
South Africa**

**Distinguished cosmologist and co-author with Stephen Hawking of the classic book *The Large Scale Structure of Space-Time*.**

**John Polkinghorne**

**Professor of Mathematics Physics, Cambridge  
University (1968-1979)**

**Later President of Queens College, Cambridge**

***“I take God very seriously indeed. I am a  
Christian believer, and believe that God  
exists and has made himself known in  
human terms in Jesus Christ.”***

**“I certainly don’t believe that there is some fundamental difference or conflict between a theistic (Christian) perspective on the world and the practice of science.”**

**John Barrow  
Professor of Mathematical Sciences  
University of Cambridge, England**

**Cosmologist who “wrote the book” on the fine tuning of the universe: *The Anthropic Cosmological Principle.***

**Allan R. Sandage**  
**Astronomer, Carnegie Institution, Pasadena, California**  
**Recipient of the 1991 Crafoord Prize of the**  
**Royal Swedish Academy of Sciences**

**From Dr. Sandage's chapter in *Origins: The Lives and Worlds of Modern Cosmologists* (Harvard University Press, 1990):**

**Q. Can a person be a scientist and also be a Christian?**

**A. Yes. The world is too complicated in all its parts and interconnections to be due to chance alone. I am convinced that the existence of life with all its order in each of its organisms is simply too well put together.**

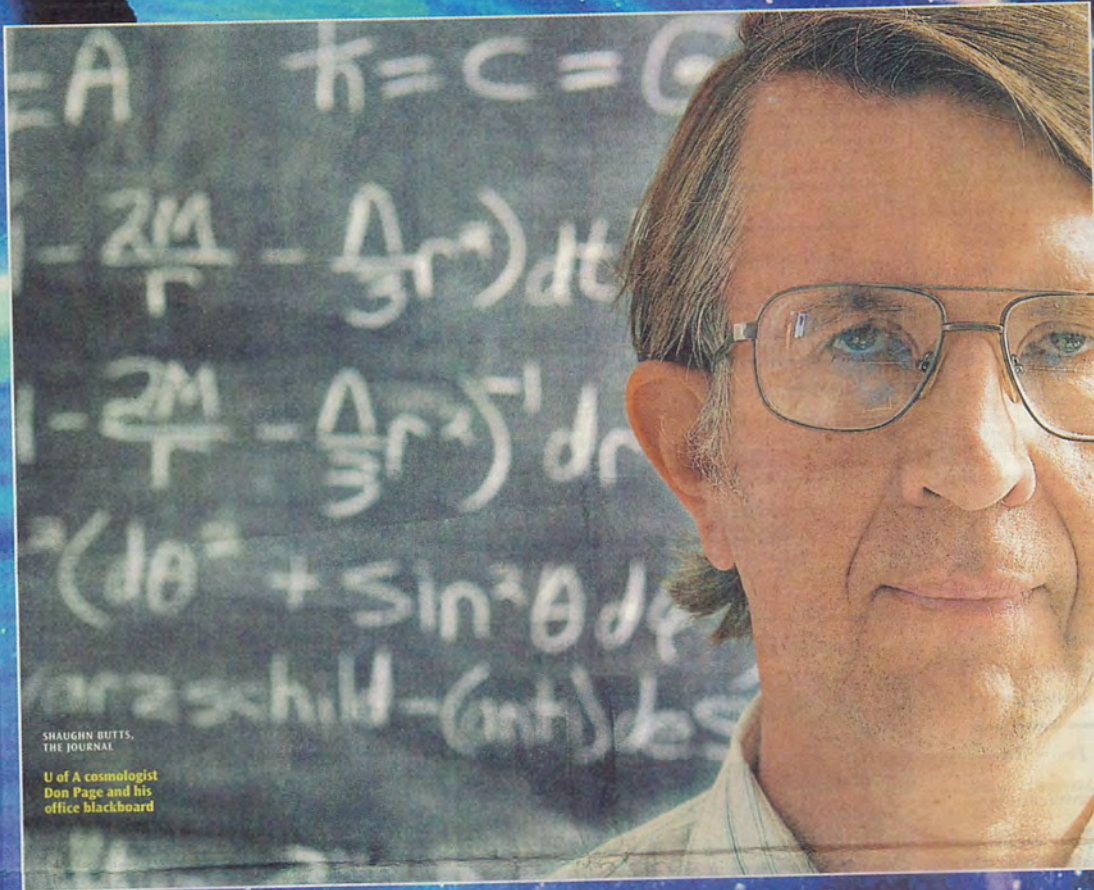


# SUNDAY READER

EDITOR: BOB BELL, 429-5209; reader@thejournal.southam.ca

EDMONTON JOURNAL

SUNDAY, FEBRUARY 3, 2002



SHAUGHN BUTTS,  
THE JOURNAL

U of A cosmologist  
Don Page and his  
office blackboard

## The beautiful mind of Don Page

**SCIENCE AND GOD** / In his search for answers to the origin of the universe, he's found some ideas on the meaning of life / **6**

***"I'm a conservative Christian in the sense of pretty much taking the Bible seriously for what it says. Of course, I know that certain parts are not intended to be read literally, so I'm not precisely a literalist. But I try to believe in the meaning I think it is intended to have."***

**Donald N. Page**

**Professor of Physics, University of Alberta**

**Has collaborated with Stephen Hawking on applications of quantum theory to gravitational physics and cosmology.**

# **Don Page**

**“If the universe basically is very simple, the theological implications of this would need to be worked out. Perhaps the mathematical simplicity of the universe is a reflection of the personal simplicity of the Gospel message:**

**...that God sent His Son Jesus Christ to bridge the gap between Himself and each of us, who have rejected God or rejected what He wants for us by rebelling against His will and disobeying Him. This is a message simple enough even to be understood by children.”**

**Professor Don Page**

**Chris J. Isham  
Professor of Theoretical Physics  
Imperial College, London**

**Labeled “Britain’s greatest quantum gravity expert”  
by Paul Davies. No small compliment!**

**“The God of Christianity is not only ‘the ground of  
Being’. He is also Incarnate.”**

**Essential therein is “the vision of the Resurrection as  
‘the new creation out of the old order’ and ..... the  
profound notion of the ‘redemption of time’ through  
the life and death of Jesus Christ.”**

**Richard E. Smalley (1943-2005)**

**Father of Nanotechnology**

**Nobel Prize in Chemistry, 1996**

**“ Recently I have gone back to church regularly with a new focus to understand as best I can what it is that makes Christianity so vital and powerful in the lives of billions of people today, even though almost 2000 years have passed since the death and resurrection of Christ. Although I suspect I will never fully understand, I now think the answer is very simple: it’s true.**



**“God did create the universe about 13.7 billion years ago, and of necessity has involved Himself with His creation ever since. The purpose of this universe is something that only God knows for sure, but it is increasingly clear to modern science that the universe was exquisitely fine-tuned to enable human life. We are somehow critically involved in His purpose. Our job is to sense that purpose as best we can, love one another, and help Him get that job done.”**

**Richard E. Smalley  
May 2005**

**The Big Bang represents an immensely powerful yet carefully planned and controlled release of matter, energy, space, and time. All this is accomplished within the strict confines of very carefully fine-tuned physical constants and laws. The power and care this explosion reveals exceed human mental capacity by multiple orders of magnitude.**

# Where Do We Go From Here?

1. **A Creator must exist. The big bang ripples and the Wilkinson probe are clearly pointing to an *ex nihilo* creation consistent with the first few verses of the book of Genesis.**

**2. The Creator must have awesome power and wisdom. The quantity of material and the power resources within our universe are truly immense. The information, or intricacy, manifest in any part of the universe, and especially in a living organism, is beyond our ability to comprehend. And what we do see is only what God has shown us within our four dimensions of space and time!**

**3. The Creator is loving. The simplicity, balance, order, elegance, and beauty seen throughout the creation demonstrate that God is loving rather than capricious.**

**4. The Creator is just and requires justice. Inward reflection and outward investigation affirm that human beings have a conscience. The conscience reflects the reality of right and wrong and the necessity of obedience.**



**5. Each of us falls hopelessly short of the Creator's standard. Perhaps the most obvious characteristic of humankind is selfishness. Who can keep his or her thoughts and attitudes pure for even an hour? If each person falls short of his or her own standards, how much more so those of an all-holy God?**

**6. Because the Creator is loving, wise and powerful, He made a way to rescue us. When we come to a point of concern about our personal failings, we can begin to understand from the creation around us that God's love, wisdom, and power are sufficient to deliver us from our otherwise hopeless situation.**

**7. If we trust our lives totally to the Rescuer, Jesus Christ, we will be saved. The one and only path is to give up all human attempts to satisfy God's requirements and put our trust solely in Jesus Christ and in His means of redemption, namely, His death on the cross.**

**Why do bad things  
happen to “good”  
people?**

**Most People want to  
serve God**

.....

**Usually in an advisory  
capacity!**

**C. S. LEWIS (1898-1963)**

**PROFESSOR OF MEDIEVAL AND RENAISSANCE ENGLISH LITERATURE  
CAMBRIDGE UNIVERSITY, ENGLAND**

**“If human life is in fact ordered by a beneficent being whose knowledge of our real needs and of the way in which they can be satisfied infinitely exceeds our own, we must expect *a priori* that his operations will often appear to us far from beneficent and far from wise, and that it will be our highest prudence to give him our confidence in spite of this.”**

**C. S. LEWIS**

**LECTURE TO THE OXFORD SOCRATIC CLUB, 1955**



**“A GOD WHOM WE COULD UNDERSTAND  
EXHAUSTIVELY, AND WHOSE REVELATION OF  
HIMSELF CONFRONTED US WITH NO MYSTERIES  
WHATSOEVER, WOULD BE A GOD IN MAN’S IMAGE,  
AND THEREFORE AN IMAGINARY GOD.”**

**JAMES I. PACKER**

**Human arrogance tends to believe that if we had been in charge of creation we would have done it better.**

**With a little more care about the details, we would have kept the beauty of sunsets, but eliminated germs like staphylococci.**

**The more we understand the processes of the world, however, the less likely does it seem that this would be possible.**

**As finite human beings, we should not claim to know God's will exhaustively.**

**But it is clear that God did not intend to create an enormous machine whose sole purpose is the elimination of human suffering.**

**Suffering is very much a part of God's plan for our brief sojourn upon this planet.**

**The major reality of the book of Job is the inscrutable mystery of innocent suffering.**

**God ordains that His children walk in sorrow and pain, sometimes because of sin, sometimes for chastening, sometimes for strengthening, and sometimes to give opportunity to reveal His comfort and grace.**

**But there are times when the compelling issue in human suffering is unknowable because it is for a heavenly purpose that those on earth cannot discern.**

**Why do bad things happen to  
“good” people?**

**An often-heard variant: “God  
would have a lot more friends  
if He treated the ones He  
already has better.”**

**Response: If God rescued from every problem those who are true to Jesus, Christians would not need faith. Their religion would be a great insurance policy, and there would be lines of selfish people ready to sign up.**



**“Undoubtedly, one of the greatest misconceptions held by many is that being a Christian means that life should suddenly smooth out, mysterious bridges will appear over all chasms, the winds of fate will be tempered, and all difficulties will disappear.**

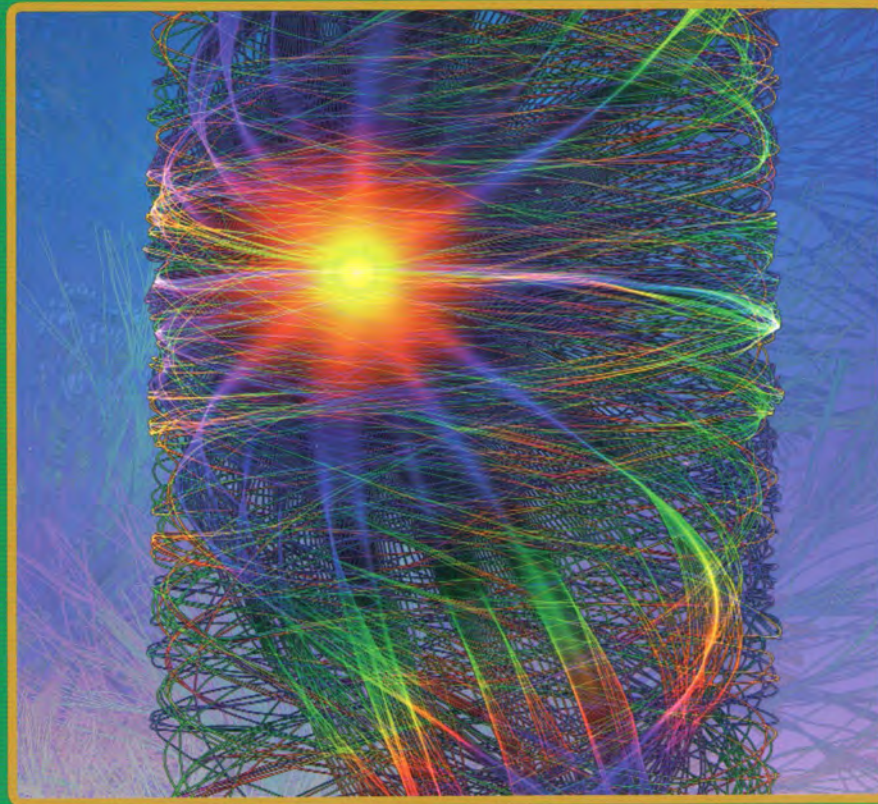
**No, Christianity is not membership in some red-carpet club. All the problems and pressures of life remain, or are even intensified.**

**Christians must face life in the raw, just as any [other person] will.**

**The purpose of the Christian life is not to escape dangers and difficulties but to demonstrate a different way of handling them. There must be trouble, or there can be no demonstration.”**

**Ray C. Stedman**

Science and Christianity:  
**CONFLICT OR  
COHERENCE?**



**Henry F. Schaefer**

SECOND EDITION



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bionic ear pioneer  
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