

# TEMPLETON REPORT

NEWS FROM THE JOHN TEMPLETON FOUNDATION

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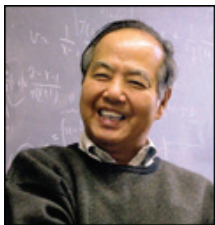
## Celebrating the Telescope in Beijing

“It was 400 years ago that we began to comprehend not just the vastness of our universe but its astonishing order and beauty as well.” With these words, spoken in mid-October at the Great Hall of the People in Beijing, John M. Templeton, Jr. opened

the New Vision 400 Conference, a celebration of four centuries of human discovery since the invention of the telescope. With the support of the Templeton Foundation, scientists and scholars from across North America, Europe, and Asia met for four days in the Chinese capital to discuss the past and future of telescope technology, new challenges in astronomy, and the role that our vastly expanded knowledge of the universe has played in reshaping human beliefs and worldviews.



It was in 1608 that the Dutch glassmaker Hans Lipperhey invented the telescope. “There are legends about how the telescope came to be,” said Donald York, a professor of astronomy and astrophysics at the University of Chicago and one of the principal organizers of the conference. “Some say that children playing in Lipperhey’s lab accidentally put together the right set of lenses and magnified objects far away, but no one really knows.” Whatever the real story, York noted, the technology spread quickly and transformed Western science.



Tsung-Dao Lee



Riccardo Giacconi



Geoffrey Marcy

The New Vision 400 Conference began with a public event at the Great Hall of the People, attracting more than 6,000 science and math students from Beijing high schools and universities. The wide-ranging session featured three renowned speakers: Nobel laureate Tsung-Dao Lee of Columbia University, whose talk, delivered in Chinese, was titled “From the Language of Heaven to the Rationale of Matter”; another Nobel Prize-winner, Riccardo Giacconi of Johns Hopkins University,

who spoke about “The Impact of Modern Telescope Development on Astronomy”; and Geoffrey Marcy of the University of California at Berkeley, who discussed the latest developments in “Searching for Other Earths and Life in the Universe.” Video of their talks can be found at the NV400 website, along with a short documentary film on the history of the telescope, produced especially for the conference.

The first several sessions of the conference were devoted to a range of technical subjects in astronomy and astrophysics. Speakers included Simon White of the Max Planck Institute for Astrophysics (Germany) on “The Development of Large-Scale Structure in the Universe”; Naoki Yoshida of the University of Tokyo on “The First Stars”; Xiaowei Liu of Peking University on “The Dark Secrets of Gaseous Nebulae”; Mark Sullivan of Oxford University on “Can We Understand Dark Energy?”; Shuangnan Zhang of Tsinghua University on “Black Hole Hunting”; Mike Shao of the Jet Propulsion Laboratory on “Advanced Optical Techniques”; and Richard Ellis of Cal Tech on “Scientific Opportunities with 30-Meter-Class Optical Telescopes.”

NV400 also addressed various “Big Questions” related to the social and intellectual impact of the telescope, with particular attention to historical differences between Europe and Asia and to current debates about the nature of the cosmos and its significance for humankind. Owen Gingerich of the Harvard-Smithsonian Center for Astrophysics and Xiaochun Sun of China’s Institute for the History of Natural Science spoke about the impact of the telescope on 17th- and 18th-century society in the West and the East. Sara Seager of MIT and Chas Beichman of the Jet Propulsion Laboratory brought the discussion back to our own day with talks on the search for life on extrasolar planets. Paul Davies of Arizona State University described the relationship between life and the laws of physics, while Renata Kallosh of Stanford University asked whether we live in a universe or a multiverse.

In one of the conference’s more philosophical presentations, George Ellis of the University of Cape Town considered “Why Are the Laws of Nature as They Are?” Peter Harrison of Oxford University and Yung Sik Kim of Seoul National University brought together the humanistic and scientific strands of the conference’s Big Questions, describing traditional views in both Europe and Asia of the relationship between the cosmos and the moral order. Abstracts of all the papers presented at the conference can be found at <http://nv400.uchicago.edu/program.html>.

The NV400 conference was the Templeton Foundation’s first major initiative in China and included the announcement of “Beyond the Horizons,” a \$2-million grant program for cutting-edge research in astronomy, astrophysics, and cosmology. A joint project of the Foundation and the Chinese Academy of Sciences, both of which have committed \$1 million to the effort, “Beyond the Horizons” will offer three rounds of RFPs from 2009 to 2011, administered by the National Astronomical Observatories of China in conjunction with the University of Chicago. Researchers from mainland China, Hong Kong, Macao, and Taiwan will be eligible for the grants.



Chinese students at the Great Hall of the People

The Foundation is grateful to a great many distinguished Chinese partners for their support of the NV400 conference. These include the China Xiangshan Science Conference, the Chinese Academy of Sciences, the National Natural Science Foundation of China, the Chinese Astronomical Society, the China Center of Advanced Science and Technology, and the National Astronomical Observatories. Donald York shared overall responsibility for planning the conference with Jiansheng Chen of Peking University, which also provided key institutional support.

For Charles Harper, Senior Vice President and Chief Strategist of the Templeton Foundation, the conference “exemplified our multidisciplinary ‘Big Questions’ focus, especially in its East-West dialogue about the relationship of human beings to the cosmos.” The idea to engage with China came directly from Sir John Templeton himself, near the end of his life. “He had the sense that China was a dynamically expanding civilization with huge potential for the Foundation,” said Harper, “and he was right. The conference has offered great opportunities for next steps.”

## NOTEBOOK

### From Genesis to Darwin

“How do you reconcile Christianity and evolution?” That was the first question that Michael Shermer, the founding publisher of *Skeptic* magazine and a columnist at *Scientific American*, asked Karl Giberson at a Templeton Book Forum event on November 17. Giberson, a professor of physics at Eastern Nazarene College in Massachusetts and the author of *Saving Darwin: How to Be a Christian and Believe in Evolution*, offered a variety of answers in the course of his genial, substantive exchange with Shermer at the Harvard Club in New York City. (Video excerpts from the event are available at [http://www.templeton.org/video/shermer\\_giberson/1.html](http://www.templeton.org/video/shermer_giberson/1.html).)



Karl Giberson

“It is not about reconciling them so much as recognizing that they don’t make as much contact as most people think,” Giberson explained. “It’s only if we get distracted by the first couple of chapters in Genesis and elevate them in importance beyond what is appropriate that we have a conflict.” Genesis, he insisted, is not meant to be read like history. As he told the online magazine *Salon* in a recent interview, “In the Bible, you read the same events chronicled by different writers, and they put things in different orders or leave things out. If someone is really chronicling events, then events would be lined up in the right order. We know the Civil War comes after the American Revolution. But a biblical author, who thought for some reason that the American Revolution seemed more relevant, might reverse the order.”

The other danger of reading Genesis as a scientific account, Giberson suggested at the Templeton Book Forum, is that it “robs the story of everything that is interesting.” There is the “repeated refrain that God looks at the world and it’s good. There is nothing scientific there, so creationists don’t talk about it. But there is something very meaningful there. It distinguishes Genesis from other creation stories.”

As Shermer pointed out during the exchange, he and Giberson actually come from similar backgrounds. They both grew up believing in the literal creation story. But whereas Shermer ended up rejecting religion altogether, Giberson has remained a believing Christian. How did they end with such different conclusions? Giberson joked that Shermer fell to the bottom of the “slippery slope” while Giberson himself was “stuck on a bush halfway down.” Believing in God, Giberson said, “makes the world so much more interesting. The mystery of God’s existence is for me a more satisfying mystery than the mystery of how all this rich complexity can arise out of particles.”

### Does Religion Enhance Health?

On December 3, the Heritage Foundation hosted a major conference in Washington, D.C. on “Religious Practice and Health: What the Research Says.” Funded by the Templeton Foundation, the meeting brought together a number of researchers who study the relationship between religious behavior and general health and well-being. Stephen G. Post, director of the Center for Medical Humanities, Compassionate Care, and Bioethics in the School of Medicine at Stony Brook University in New York and co-author of *Why Good Things Happen to Good People*, gave the keynote address. (Post is an academic advisor to the Templeton Foundation and a member of the Board of Trustees.) The event



Stephen G. Post

received extensive coverage in the *Washington Post*, which described the growth of this relatively new field and the controversies that have swirled around it. For more about the Templeton Foundation's support for research in this area, see the October 15, 2008 issue of the *Templeton Report*.

### Debt Forgiveness, Pro and Con

National Public Radio's *Here and Now* recently aired a segment based on a debate from the pages of *In Character: A Journal of Everyday Virtues*, which is published by the Templeton Foundation. Taken from the journal's recent issue on the virtue of forgiveness, the exchange concerned the pressing moral and public-policy question of how to treat individuals who have become entangled in the country's mortgage crisis. David M. Abromowitz of the Center for American Progress argued for leniency; Nicole Gelinas of the Manhattan Institute argued for strictness. For their written exchange in *In Character*, visit <http://www.incharacter.org/article.php?article=123>.



Note to subscribers: The next issue of the *Templeton Report* will appear on January 7, 2009. Happy holidays!

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