



Astronomy Cosmology Breakthroughs and the God Question

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Institute for Theological Encounter with Science and Technology

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Abstract:

In this symposium the conveners ask us to extend our reach beyond the planet earth for a short time to experience the vast reaches of God’s creation observed through science and technological innovation., gifts of God. What or Who guides us? What or Who in this wonderful ordered universe holds us human beings in existence? Is that the God question? What is the relationship of faith/theology to science and technology, multiverses, dark matter, nebulae, Anthropic coincidences and even the possibility of extraterrestrial beings. Would those “beings” need a Redeemer? The Incarnation? Would it be Jesus?

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Foreword:

Cosmology Breakthroughs and the God Question. What an imposing title for a weekend ITEST symposium! A study of the “breakthroughs” alone could consume a month of weekends, but the God question too?

The members of the Board of Directors admit to some hesitancy in adopting this topic when Father Brungs suggested it in the fall of 2005. He had indicated that, although our primary interest lay in the area of the life sciences, we, as an institute, should prepare to lift our eyes from the God-given beauty of the Earth to the equally beautiful God-created wonders of the Heavens above. Sister Carla Mae Streeter, OP, provided the theological “piece” by adding “. . .and the God Question.”

In studying the advances in science and technology we are asked to look beyond our sometimes self-centered concerns to the universe and the cosmos beyond. What or Who is it that guides us? Is it the Solar system held in such exquisite balance? What or Who in that wonderful ordered universe holds us human beings, in existence? In this instance, while the astronomers and cosmologists gaze upwards, the theologians and experimental scientists help to keep us anchored to earth.

In this volume we proudly present the papers of three essayists: Stephen Barr, PhD, cosmology, Guy Consolmagno, SJ, astronomy and Neyle Sollee, MD, interaction of science and faith. Responding from the theological and cultural viewpoints are: Rev. Dr. Steven Kuhl and Sebastian Mahfood, PhD, respectively.

Although the papers are a “must read” for anyone who is interested in planetary science, cosmology and theology, the discussion sessions reveal the “heart” of the symposium as the presenters and the participants engage in lively and sometimes heated (but always charitable) discussion and argument about the relationship of faith/theology to science and technology, multiverses, exo-planets, black holes, dark matter, nebulae, Anthropic coincidences and even the possibility of extraterrestrial beings. Would those “beings” need a Redeemer? The Incarnation? Would it be Jesus?

Further, how did the tasks accomplished through the Hubble telescope, the lunar landing, the walks in space engineered by NASA and other discoveries and breakthroughs speak to our relationship with the Deity? Are scientists truly aware of the beauty they discover as they observe the structure of a blood cell through the microscope or focus the lens on a telescope to view the countless stars in the Milky Way Galaxy? Are they moved to praise God for it?

In an urgent and passionate plea to the participants at the 2005 ITEST workshop, Father Robert Brungs, SJ asked, “Where are the Psalmists of the 21st century? Who in the scientific community sings of the beauty of Creation today, from the beauty of the universe, the comets, the planets, -- where are they? Why don’t scientists look at what they are doing, and sing of the beauty of God?”

Let us see how scientists of faith at this symposium would respond if they were asked that question.

Stephen Barr, a 21st century psalmist and cosmologist answers: “In my talk I quoted Minucius Felix, (who saw) the classic argument of the orderliness of the universe pointing to a Law Giver. Now in the 21st century in fundamental physics we see the laws of nature so much more clearly and deeply. What astonishing, intricate, subtle, deep, profound mathematical structures! The world has an orderliness that goes far beyond what people of ancient times were able to see. They saw regularities in the Heavens; we see so much more now when we deal with theories of physics.”

Neyle Sollee easily shares his understanding of the beauty and depth of the God of Creation. Here he reflects on bridging the gap that often exists between the layperson and the scientist. “I would want to be a person who reflects the wonder and mystery of all creation.” Further, “At night looking through the telescope, my “field of view” can extend billions of light years away. Wonder and awe arise in me as I gaze on this (terrible) beauty. For me nature and grace, science and faith have always been in a harmonious relationship.”

Brother Guy Consolmagno sings his praise of the Heavens: “What do I see in Creation, in Astronomy? First of all, beauty. Beauty is big to this God. Beauty is not something that happens by accident. Beauty is something that is there by design. I see phenomenal complexity that arises out of very simple principles... And I see stories. I can see from the cloud in Orion where stars are being formed to the planetary nebulae at the death of the stars with gas clouds bursting off and the gas and dust from those clouds then becoming more clouds, and more stars are being born... I see an evolution in the stars.”

I think that Father Brungs has his answer.

Finally, we owe a debt of gratitude to Dr. Thomas P. Sheahan, our facilitator, who managed to make the running of the symposium look easy. We thank him too, not only for his managerial ability, but also for his contributions to the scientific side of the discussion. His ability to add commentary to the discussion drawing on his experience as a physicist and his knowledge of current developments in the field further added to the unity and coherence of the meeting.

I add an “extra” special thanks to Tom Sheahan for providing invaluable assistance in the editing of the transcripts of the proceedings. Without his help, this editor would have been hard pressed to find her way through the “morass” of mathematical equations, arcane formulae, and ancient Greek symbols so prevalent in the scientific field.

Borrowing the lines from Father Brungs at the end of the Foreword to the 2005 proceedings:

“I recommend the results to you all.”

Marianne Postiglione, RSM
ITEST: Acting Director
May, 2008