God Ever Geometrizes: Apologetics in Mathematics

Tuesday, December 1, 2009, Room 109, Rogers Bldg. 5:30. Pizza & Drink.

**Abstract:** Heinrich Hertz (1857–1894) said "One cannot escape the feeling that ... mathematical formulas have an independent existence and an intelligence of their own, that they are wiser than we are, wiser even than their discoverers, that we get more out of them than was originally put into them." There are numerous instantiations of Hertz's observation. We will discuss why Georg Cantor (1845-1918) took his work in transfinite numbers to the Vatican. How did Karl Friedrich Gauss (1777–1855) believe God was involved in his mathematics? How did Blaise Pascal (1623-1662) use set theory and probability to argue for God's existence? What numbers did Gottfried Wilhelm Leibniz (1646–1716) say are the "fine and wonderful recourse of the divine spirit, almost an amphibian between being and not being." How did Kurt Gödel (1906–1978) mathematically prove Auslem's ontological argument for God's existence? How did an 18<sup>th</sup> century monk generalize existence to higher dimensions that offer explanations of Biblical miracles? How does Gregory Chaitin (1947-) mathematically prove there are astonishing things that exist that are unknowable? And how does Rice's Theorem shed light on a consistency between determinism and knowability? Stephen Hawking (1942-) claims no theory in science can be proven. We simply accumulate evidence. Like all apologetics, these insights of mathematics do not prove God's existence nor Christianity. But they add to the accumulation of evidence.

This talk, although accessible by those not well versed in mathematics, provides references for deeper study by those who are.

Sponsored by the Baylor Society for Conversations in Religion, Ethics and Science & the Baylor Student Chapter of the American Scientific Affiliation **Robert J. Marks II,** Ph.D. Distinguished Professor of Electrical & Computer Engineering. Baylor University

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