

American Mathematical Society

*The Einstein Public Lecture in Mathematics,
in celebration of the 100th anniversary
of Albert Einstein's annus mirabilis*

UNIVERSITY OF
Nebraska
Lincoln

The Nature of Space

Presented by

Sir Michael Atiyah

Image courtesy of Dr. Martin Lo, NASA/JPL, Caltech, artist Ciel Koenig

Friday, October 21, 2005

4:00–5:00 p.m.

Kimball Recital Hall

University of Nebraska–Lincoln

Reception: Van Brunt Visitors Center • 5:15–6:45 p.m.



Sir Michael Atiyah

Photo courtesy of Anne Lise Flåvik/The Abel Prize/
The Norwegian Academy of Science and Letters



ABSTRACT: *For more than two thousand years philosophers, mathematicians and physicists have struggled to understand the nature of space. Kant studied the role of the human mind, mathematicians examined the logical ramifications of space and physicists investigated experimental phenomena. The story continues to the present day, with increasingly exotic scenarios of vibrating strings in ten dimensional space-time. I shall review the history and present status of the great philosophical controversies in the light of modern developments.* — Sir Michael Atiyah

The work of Atiyah in topology and geometry has had a profound influence on these areas over the past fifty years. It has also been a major factor in the new relations that have grown up between geometry and physics. Atiyah has in fact been a leader in developing these relations, and in encouraging both mathematicians and physicists to see their subjects as part of a common enterprise.

Sir Michael Atiyah has won numerous awards and honors. He was awarded a Fields Medal in 1966. He has served as Director of the Newton Institute, Master of Trinity College at Cambridge, and President of the Royal Society of London. In May 2004, he was presented the Abel Prize in Mathematics with I.M. Singer for the “discovery and proof of the Index Theorem connecting geometry and analysis in a surprising way” and an “outstanding role in building new bridges between mathematics and theoretical physics.”

This event is part of the AMS 2005 Fall Sectional meeting at UNL October 21-23, 2005. For more information, see www.math.unl.edu/pi/events/ams2005

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