

In celebration of the one-hundredth anniversary of Einstein's annus mirabilis, the American Mathematical Society presents...

The Einstein Public Lecture in Mathematics

A lecture given by Sir Michael Atiyah

The Nature of Space

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 the status of the great philosophical controversies in the light of modern developments.

*—Sir Michael Atiyah,
in his abstract for the lecture*



The American Mathematical Society is sponsoring a public lecture in mathematics in celebration of the one-hundredth anniversary of Einstein's *annus mirabilis*. The year 1905 marked the publication by Albert Einstein in Germany of three fundamental papers that changed the course of twentieth-century physics. Einstein later moved to the United States, where he became a founding member of the School of Mathematics at the Institute for Advanced Study in Princeton.

The lecture will take place on Friday, October 21, 2005, at the AMS Sectional Meeting in Lincoln, Nebraska. The lecture is aimed at members of the general public, but will also be of interest to professional mathematicians.

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.”

—James Arthur, President

For more information see www.math.unl.edu/pi/events/ams2005.

