"THE SHAPE OF SPACE": MULTIMEDIA TALK BY MATHEMATICIAN JEFF WEEKS

The Mathematical Sciences Research Institute (MSRI) in Berkeley presents mathematician and MacArthur Fellow Jeff Weeks in a multimedia talk on "The Shape of Space," on MONDAY, APRIL 19th from 7:30 pm to 9:00 pm, at the Berkeley Repertory Theatre's RODA Theatre at 2015 Addison Street in Berkeley. Admission is free and the lecture is intended for a general audience, from middle-school age through adults.

What is the shape of the Universe? Is it boundless or something else entirely? Whether the universe is finite or infinite has been the subject of heated debate for over 2000 years. Only in the last decade have the technological means become available to provide a definitive answer; and only since the mathematics derived by Bernhard Riemann in the 19th century and Einstein's theoretical work in the 20th century has the notion emerged that space itself may have a "shape."

On a clear night, the universe seems infinite. Yet this infinity, Weeks explains, might be an illusion. In the first half of the presentation, Weeks uses computer games to introduce the concept of a "multiconnected universe," then takes the audience on an Interactive 3D graphics tour exploring several possible shapes for space. Weeks will show satellite data released in February 2003 that provides tantalizing clues to the true shape of our universe.

Jeff Weeks is a leader in current attempts to determine the shape of the cosmos, as well as an innovator in software and computer games designed to explore and explain the possible shapes of space.

DR. JEFF WEEKS describes himself as a "freelance mathematician." He earned an A.B. from Dartmouth College and a Ph.D. from Princeton University, both in mathematics. Awarded a MacArthur Fellowship, his main interests are geometry, topology, education and cosmology. He lives in Canton, NY, and divides his time between research and education. Weeks was featured on the PBS special series "Life by the Numbers" and was a consultant for the special *National Geographic* centennial issue on the universe. Jeff is the author of the book *The Shape of Space* (Marcel Dekker, second edition 2002), the multimedia unit for middle schools *Exploring the Shape of Space* (Key Curriculum Press, 2001), and numerous research and expository articles.

WHERE: Berkeley Repertory Theatre's RODA Theatre, 2015 Addison Street, Berkeley, CA 94704; for more info, call MSRI at 510.642.0143

WHEN: MONDAY, APRIL 19, from 7:30 pm to 9:00 pm

HOW: FREE.

WHY: **Curiosity!** – The only prerequisites for this talk are imagination and a sense of wonder!

-- Product of the smallest three primes --

THE MATHEMATICAL SCIENCES RESEARCH INSTITUTE (MSRI), located in Berkeley, California, fosters mathematical research by bringing together foremost mathematical scientists from around the world in an environment that promotes creative and effective collaboration. Primarily supported by the US National Science Foundation, the Institute is an independent non-profit corporation that enjoys academic affiliation with seventy-five leading universities and support from individuals, corporations, foundations, and other government and private organizations. Public outreach programs and the largest mathematical streaming video archive in the world ensure that many others interact with MSRI throughout the year. For more information visit **www.msri.org**