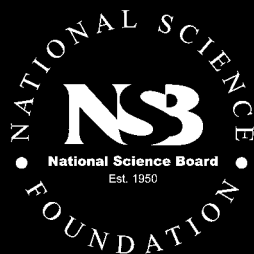


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VOLUME 1

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Cover Image

Computer simulation of the merger of two black holes and the ripples in spacetime—known as gravitational waves—born of the merger.

This simulation is one of a series depicting orbiting black holes and represents the first time that three-quarters of the full orbit of a black hole has been computed. Researchers from the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) in Potsdam, Germany, created the simulations in 2002 on the National Center for Supercomputing Applications (NCSA) Itanium-based Linux computational cluster. The visualizations are by Werner Bengert of the Albert Einstein Institute and the Konrad-Zuse-Zentrum in Berlin. (*Credit: scientific contact, Ed Seidel, eseidel@aci.mpg.de; Max Planck Institute for Gravitational Physics—Albert Einstein Institute [AEI]; Werner Bengert, Zuse Institute and AEI.*)

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National Science Board

January 13, 2006

The Honorable George W. Bush
The President of the United States
The White House
Washington, DC 20500

Dear Mr. President:

It is my honor to transmit to you, and through you to the Congress, the seventeenth in the series of biennial Science Indicators reports, *Science and Engineering Indicators 2006*. The National Science Board submits this report in accordance with Sec. 4(j)1 of the National Science Foundation Act of 1950, as amended.

The Science Indicators series was designed to provide a broad base of quantitative information about U.S. science, engineering, and technology for use by public and private policymakers. With each new edition, the Board seeks to continually expand the data sources and pertinence to the broad user community. *Science and Engineering Indicators 2006* contains analyses of key aspects of the scope, quality, and vitality of the Nation's science and engineering enterprise and global science and technology.

The report presents information on science, mathematics, and engineering education at all levels; the scientific and engineering workforce; U.S. and international research and development performance and competitiveness in high technology; and public attitudes and understanding of science and engineering. A chapter on state-level science and engineering presents state comparisons on selected indicators. Because of the widespread upgrading of scientific and technological capabilities around the world, the Overview chapter of this report focuses on global science and technology, including international trends and the U.S. position in the global context.

I hope that you, your Administration, and Congress will find the new quantitative information and analysis in the report useful and timely for informed thinking and planning on national priorities, policies, and programs in science and technology.

Respectfully yours,



Warren M. Washington
Chairman

National Science Foundation

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