



The Einstein Lectures Dahlem, hosted by Freie Universität Berlin in partnership with several external institutions, are dedicated to the epochal work of Albert Einstein. Einstein was the director of the Kaiser Wilhelm Institute of Physics for almost two decades. Held in Dahlem, a district in Berlin that is traditionally a center of scientific research, the Einstein Lectures Dahlem present a first-rate, interdisciplinary colloquium. The lectures address a broad academic public and cover various scientific disciplines influenced by Einstein's thinking.

On 25 November 1915, Albert Einstein introduced his general theory of relativity for the first time to the scientific community in Berlin. To mark the 100th anniversary of this famous scientific theory, Freie Universität Berlin and the Max Planck Society have jointly organized this special 15th Einstein Lecture. Both scientific institutions have a very special connection to Albert Einstein and his scientific legacy, which is at the heart of modern physics.

Guests are invited to ask questions and take part in the discussion with Kip S. Thorne.

www.fu-berlin.de/einsteinlectures

This very special Einstein Lecture in cooperation with the Max Planck Society is dedicated to the 100th anniversary of Einstein presenting his general theory of relativity.

November 25, 2015 / 6.00 pm

Venue: Freie Universität Berlin,
Henry-Ford-Bau, Garystr. 35, 14195 Berlin

Please register by November 15, 2015:

www.fu-berlin.de/einsteinlectures

15th EINSTEIN LECTURE
DAHLEM
INVITATION —
NOVEMBER 25, 2015



15th Einstein Lecture Dahlem

Music / J. S. Bach, Partita no. 2 in D minor for solo violin, BWV 1004, Allemanda - Corrente

Welcome / Prof. Dr. Peter-André Alt
President of Freie Universität Berlin

Introduction / Prof. Dr. Jürgen Renn
Director at the Max Planck Institute
for the History of Science, Berlin

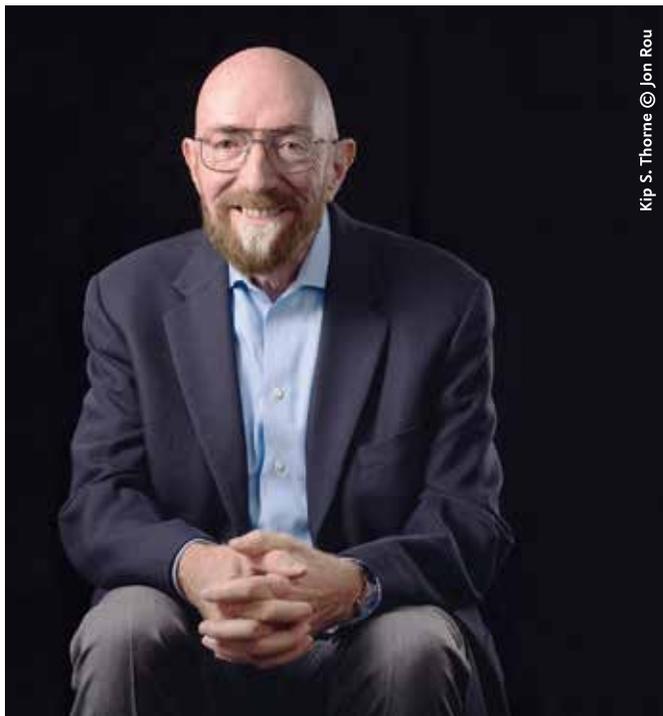
A Century of Einstein's Relativity: From the Big Bang to Black Holes and "Interstellar"

Professor Kip S. Thorne
California Institute of Technology, Pasadena

Music / W. A. Mozart, Sonata in A major for piano and violin, K. 305, Allegro di molto - Tema con Variazioni, Andante grazioso

Artists / Sevimbike Elibay and Bernhard Hartog

Pianist Sevimbike Elibay studied at the Julliard School in New York and is the recipient of numerous music prizes. She has made a name for herself as both chamber musician and soloist. Violinist Bernhard Hartog was 1st concertmaster of the Deutsches Symphonie-Orchester Berlin from 1980 to 2014. He also enjoyed great success as a soloist and with the Hartog-Quartett. As a music duo, Elibay and Hartog have performed to critical acclaim in Europe and the USA. The selection of musical works they have chosen within the framework of the Einstein Lecture harks back to Einstein's admiration for Bach and his fondness for Mozart's violin sonatas.



Kip S. Thorne

received his B.S. from the California Institute of Technology (Caltech) in 1962, and his Ph. D. from Princeton University in 1965. He returned to Caltech as an associate professor in 1967 and became a professor of theoretical physics in 1970, the William R. Kenan, Jr. Professor in 1981, and the Feynman Professor of Theoretical Physics in 1991. Thorne's research has focused on gravitation physics and astrophysics, with emphasis on relativistic stars, black holes and gravitational waves.

In June 2009 Thorne resigned his Feynman Professorship (becoming the Feynman Professor of Theoretical Physics, Emeritus) to launch a new career in writing, movies, and continued scientific research. His first film project was "Interstellar" (2014), which he worked on with Christopher Nolan. Thorne was the film's science advisor and an executive producer. Together with Lynda Obst he co-authored the film treatment on which the movie was based.

A Century of Einstein's Relativity: From the Big Bang to Black Holes and "Interstellar"

100 years ago, Albert Einstein formulated his general theory of relativity – a set of physical laws that attribute gravity to the warping of time and space. These laws have been wonderfully successful. They have been tested with high precision in the solar system and in binary pulsars. They explain the expansion of the universe and predict black holes and gravitational waves.

When combined with quantum theory they provide a tentative framework for understanding the universe's big-bang birth. And they have become embedded in popular culture via, for example, the science fiction movie "Interstellar".

Thorne will discuss relativity's first century, using "Interstellar" to illustrate many of relativity's profound ideas.

