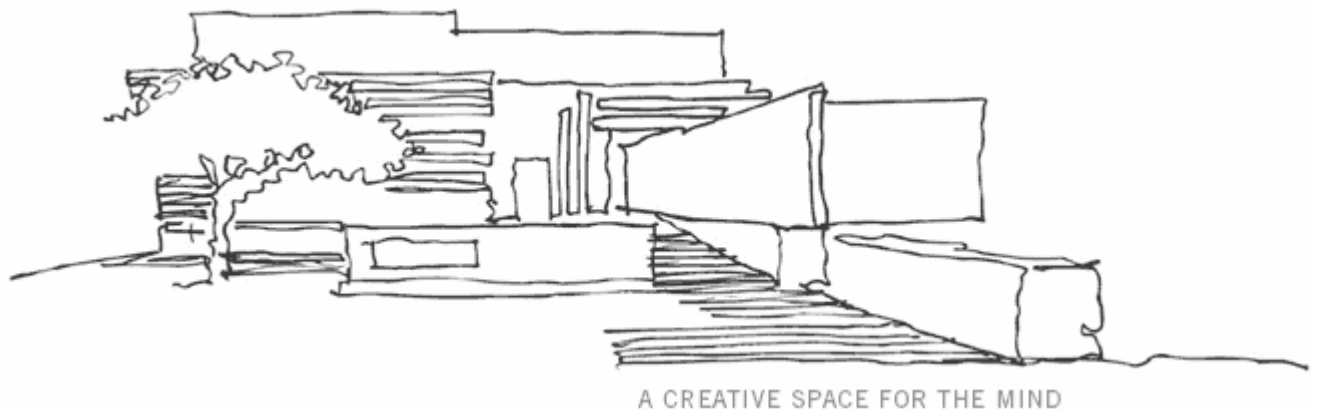


2010 STIAS LESINGSREEKS

2010 STIAS LECTURE SERIES



stias

STELLENBOSCH INSTITUTE FOR ADVANCED STUDY
STELLENBOSSE INSTITUUT VIR GEVORDERDE NAVORSING

U word hiermee vriendelik uitgenooi na die vyfde openbare **STIAS** lesing van 2010. Hierdie geleentheid bied aan alle US navorsers en studente, sowel as belangstellendes vanuit die publiek, die kans om meer te leer oor die werksaamhede van STIAS genote.

By hierdie geleentheid sal **Prof Kip Thorne, Feynman Professor in Teoretiese Fisika (Emeritus), Kalifornië Instituut van Tegnologie en Donald Gordon STIAS genoot** 'n aanbieding gee met die titel:

***The Warped Side of our Universe:
From the Big Bang to Black Holes and Gravitational Waves***

There is a Warped Side to our Universe: objects and phenomena that are made from warped space and warped time. Three examples are black holes, the big bang in which our Universe was born, and ripples in the fabric of space-time, called gravitational waves. Thorne will describe the Warped Side of our Universe and the quest to probe it theoretically using computer simulations, and observationally using gravitational waves.

Datum: Donderdag 18 November 2010

Tyd: 18:00

Plek: Wallenberg Navorsingsentrum Ouditorium, STIAS, Maraisstraat, Stellenbosch

Ons sien uit daarna om u by hierdie geleentheid te verwelkom - moet dit nie misloop nie!

Reserveer asb. u sitplek. Kontak vir Maryke Hunter-Husselmann 021 808 4623 of mh3@sun.ac.za

You are hereby cordially invited to attend the fifth **STIAS** lecture of 2010. This event will offer all SU researchers and students, as well as members of the public, the opportunity to learn more about the work of STIAS fellows.

At this event, **Prof Kip Thorne, Feynman Professor of Theoretical Physics (Emeritus), California Institute of Technology and Donald Gordon STIAS fellow** will present a talk with the title:

***The Warped Side of our Universe:
From the Big Bang to Black Holes and Gravitational Waves***

There is a Warped Side to our Universe: objects and phenomena that are made from warped space and warped time. Three examples are black holes, the big bang in which our Universe was born, and ripples in the fabric of space-time, called gravitational waves. Thorne will describe the Warped Side of our Universe and the quest to probe it theoretically using computer simulations, and observationally using gravitational waves.

Date: Thursday 18 November 2010

Time: 18:00

Place: Wallenberg Research Centre Auditorium, STIAS, Marais Street, Stellenbosch

We look forward to welcoming you at this event, which is not to be missed!

Please reserve your seat: Contact Maryke Hunter-Husselmann 021 808 4623 or mh3@sun.ac.za

Prof Kip Thorne

Kip Thorne received his B.S. degree from Caltech in 1962 and his Ph.D. from Princeton University in 1965. He returned to Caltech as an Associate professor in 1967 and became Professor of Theoretical Physics in 1970, The William R. Kenan, Jr., Professor in 1981, The Feynman Professor of Theoretical Physics in 1991, and The Feynman Professor of Theoretical Physics, Emeritus, in 2009. Thorne's research has focused on Einstein's general theory of relativity and on astrophysics, with emphasis on relativistic stars, black holes and especially gravitational waves. He was cofounder (with R. Weiss and R.W.P. Drever) of the LIGO (Laser Interferometer Gravitational Wave Observatory) Project, with which he is still associated. He is a member of the LISA (Laser Interferometer Space Antenna) International Science Team.

*Thorne was elected to the American Academy of Arts and Sciences in 1972, the National Academy of Sciences in 1973, and the Russian Academy of Sciences and the American Philosophical Society in 1999. He has been awarded the Lilienfeld Prize of the American Physical Society, the Karl Schwarzschild Medal of the German Astronomical Society, the Albert Einstein Medal of the Albert Einstein Society in Berne, Switzerland, and the Common Wealth Award for Science, and was named California Scientist of the Year in 2004. For his book for nonscientists, *Black Holes and Time Warps: Einstein's Outrageous Legacy* (Norton Publishers 1994), Thorne was awarded the American Institute of Physics Science Writing Award, the Phi Beta Kappa Science Writing Award, and the (Russian) Priroda Readers' Choice Award. In 1973 Thorne coauthored the textbook *Gravitation*, from which most of the present generation of scientists have learned general relativity theory. Fifty-two physicists have received the PhD at Caltech under Thorne's personal mentorship.*

*In June 2009 Thorne resigned his Feynman Professorship (becoming the Feynman Professor of Theoretical Physics, Emeritus) in order to ramp up a new career in writing, movies, and continued scientific research. His principal current writing project is a textbook on classical physics. His principal current movie project is **Interstellar**, for which he co-authored the story and is executive producer, and Steven Spielberg is the Director.*