





LAUREATES 2016

Astrophysics

Ronald W. P. Drever,
California Institute of
Technology, US

Kip S. Thorne,
California Institute of
Technology, US

Rainer Weiss,
Massachusetts Institute of
Technology, US

*"for the direct detection of
gravitational waves"*

Nanoscience

Gerd Binnig,
Former Member of IBM
Zurich Research Laboratory,
Switzerland

Christoph Gerber,
University of Basel,
Switzerland

Calvin Quate,
Stanford University, US

*"for their transformative
contributions to the field of
nano-optics that have broken
long-held beliefs about the
limitations of the resolution
limits of optical microscopy
and imaging"*

Neuroscience

Eve Marder,
Brandeis University, US

Michael Merzenich,
University of California
San Francisco, US

Carla Shatz,
Stanford University, US

*"for the discovery of mecha-
nisms that allow experience
and neural activity to remodel
brain function"*



THE KAVLI PRIZE

The Kavli Prize emphasizes the science of the greatest physical dimensions of space and time, the science of the smallest dimensions of systems of atoms and molecules, and the science of the most complex systems, especially living organisms.

The Kavli Prize in Astrophysics
Awarded for outstanding achievements in advancing our knowledge and understanding of the origin, evolution and properties of the universe, including the fields of cosmology, astrophysics, astronomy, planetary science, solar physics, space science, astrobiology, astronomical and astro-

physical instrumentation, and particle astrophysics.

The Kavli Prize in Nanoscience
Awarded for outstanding achievements in the science and applications of the unique physical, chemical and biological properties of atomic, molecular, macromolecular and cellular structures and systems that are manifest in the nanometre scale, including molecular self-assembly, nanomaterials, nanoscale instrumentation, nanobiotechnology, macromolecular synthesis, molecular mechanics and related topics.



The Kavli Prize in Neuroscience
Awarded for outstanding achievements in advancing our knowledge and understanding of the brain and nervous system, including molecular neuroscience, cellular neuroscience, systems neuroscience, neurogenetics, developmental neuroscience, cognitive neuroscience, computational neuroscience and related facets of the brain and nervous system.

The Kavli Prizes recognize scientists for their seminal advances in three research areas: astrophysics, nanoscience and neuroscience. Each Kavli Prize consists of USD 1,000,000, a scroll and a gold medal for each scientific field.

The Prize was established to:

- Recognise outstanding scientific research
- Honour highly creative scientists
- Promote public understanding of scientists and their work
- Foster international cooperation among scientists



The Kavli Prize is a partnership between The Norwegian Academy of Science and Letters, The Kavli Foundation (US) and The Norwegian Ministry of Education and Research.

The Academy appoints the three Prize Committees after receiving recommendations from the following international academies and equivalent scientific organizations:

- The Chinese Academy of Sciences
- The French Academy of Sciences
- The Max Planck Society (Germany)
- The National Academy of Sciences (US)



- The Norwegian Academy of Science and Letters
- The Royal Society (UK)

The Committees review and recommend the prize winners to the Academy, which administers the selection process and announces the prize winners.

The Prize is awarded every second year by the Academy at a ceremony in Oslo, Norway.



THE KAVLI PRIZE

SCIENCE PRIZES FOR THE FUTURE

ASTROPHYSICS
NANOSCIENCE
NEUROSCIENCE

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THE NORWEGIAN MINISTRY
OF EDUCATION AND RESEARCH

THE KAVLI FOUNDATION



THE NORWEGIAN ACADEMY OF SCIENCE AND LETTERS

The Norwegian Academy of Science and Letters
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N-0271 Oslo

Tel: +47 22 84 15 00

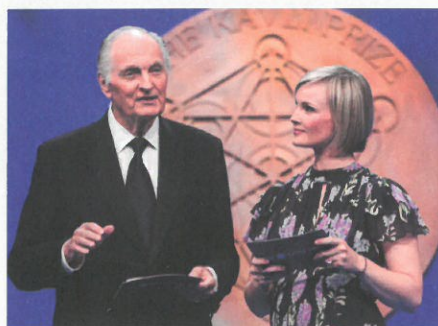
www.kavliprize.org

THE KAVLI PRIZE 2016

In September 2016, the Kavli Prize was awarded for the fifth time in Oslo, Norway. The prizes were presented by His Majesty the King at Oslo Concert Hall and 1,200 people attended the ceremony.

Later the same evening there was a banquet for the Laureates held at Oslo City Hall with 500 invited guests from around the world.

Both events were part of *The Kavli Prize Week*, a week filled with activities that included laureate lectures and science symposia in astrophysics, nanoscience and neuroscience with lectures by world-renowned scientists.



CALENDAR 2017 - 2018

2017
September 1 – December 1 :
Call for Nominations

September 25 –
Kavli Prize Symposium at
IBM Zürich with Gerd Binnig
and Christoph Gerber

September 28 –
Kavli Prize Laureate Lecture
by James E. Rothman at
the Carnegie Institution
for Science in Washington,
DC, US

2018
February –
Announcement at AAAS
of the Scholarship Winners
for attending the 2018 Kavli
Prize Week. In co-operation
with WFSJ

May/June –
Announcement of the 2018
Kavli Prize Laureates

The Kavli Prize Week in
Oslo, Norway

September 3
Laureate Interviews
The laureates are interviewed
in front of an audience at the
University of Oslo

September 4
Award Ceremony
A gala performance uniting
science and culture held at
Oslo Concert Hall

Banquet
The Norwegian Government
hosts a banquet in honor
of the laureates with some
500 guests invited from
around the world

September 6
The Kavli Prize Symposia
in nanoscience and neuro-
science held in Trondheim
The Kavli Prize Symposium
in astrophysics held in
Oslo World leading scien-
tists within the fields of the
prizes give lectures

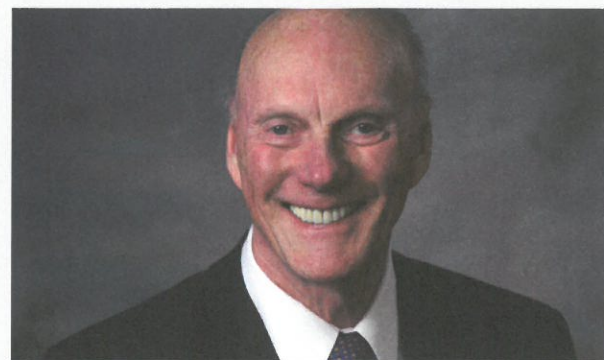
FRED KAVLI

(1927 - 2013)

Fred Kavli [1927-2013] was an entrepreneur and philanthropist dedicated to supporting science that benefits humanity.

A Norwegian-born American, Fred Kavli grew up in a small village in Norway where, as a young man, he watched the Northern Lights while pondering the universe, nature, and the wonders of humanity.

That love of science would stay with him throughout his life. After receiving his education in physics at the Norwegian Institute of Technology, he migrated to the United States, where shortly thereafter he founded the Kavlico Corporation. He established the Kavli Foundation in



2000 in order to advance science for the benefit of humanity, promote public understanding of scientific research, and support scientists and their work. As chairman of The Kavli Foundation, his many accomplishments included overseeing the establishment of a worldwide community of renowned

research institutes in the fields of astrophysics, nanoscience, neuroscience and theoretical physics. He led the Foundation's efforts to establish the Kavli Prizes in cooperation with Norway.

Fred Kavli passed away on November 21, 2013 and is laid to rest in his home-village of Eresfjord, Norway.

THE KAVLI PRIZE LAUREATES

ASTROPHYSICS

- 2008**
- Maarten Schmidt, California Institute of Technology, US
 - Donald Lynden-Bell, University of Cambridge, UK

- 2010**
- Jerry E. Nelson, University of California Santa Cruz, US
 - Raymond N. Wilson, European Southern Observatory, Germany
 - Roger Angel, University of Arizona, US

- 2012**
- David Jewitt, University of California Los Angeles, US
 - Jane Luu, Massachusetts Institute of Technology, US
 - Michael Edwards Brown, California Institute of Technology, US

- 2014**
- Alan H. Guth, Massachusetts Institute of Technology, US
 - Andrei D. Linde, Stanford University, US
 - Alexei A. Starobinsky, Russian Academy of Sciences, Russia

NANOSCIENCE

- 2008**
- Louis Brus, Columbia University, US
 - Sumio Iijima, Meijo University, Japan

- 2010**
- Donald M. Eigler, IBM Almaden Research Center, US

- Nadrian C. Seeman, New York University, US

- 2012**
- Mildred Dresselhaus, Massachusetts Institute of Technology, US

NEUROSCIENCE

- 2014**
- Thomas W. Ebbsen, Université de Strasbourg, France
 - Stefan W. Hell, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
 - Sir John B. Pendry, Imperial College London, UK

- 2008**
- Sten Grillner, Karolinska Institute, Sweden
 - Thomas M. Jessell, Columbia University, US
 - Pasko Rakic, Yale University, US

- 2010**
- Richard M. Scheller, Genentech, US
 - Thomas C. Südhof, Stanford University, US
 - James E. Rothman, Yale University, US

- 2012**
- Cornelia Isabella Bargmann, The Rockefeller University, US
 - Ann Martin Graybiel, Massachusetts Institute of Technology, US
 - Winfried Denk, Max Planck Institute for Medical Research, Germany

- 2014**
- Brenda Milner, Montreal Neurological Institute, McGill University, Canada
 - John O'Keefe, University College London, UK
 - Marcus E. Raichle, Washington University in St. Louis School of Medicine, US