



Curriculum Vitae Prof. Dr. Reinhard Genzel



Name: Reinhard Genzel

Born: 24 March 1952

Research Priorities: experimental astrophysics, black holes, galaxy nuclei, galaxy evolution, high-resolution infrared/submillimeter astronomy, star formation, extragalactic astrophysics

Reinhard Genzel is an astrophysicist. He is one of the world's leading researchers in the field of infrared and submillimeter astronomy. His primary interest is in the formation, evolution, and nuclei of galaxies such as our Milky Way. Genzel is also studying the formation and evolution of black holes and stars. Another field of his research is the interstellar medium. Genzel was awarded the Nobel Prize for Physics in 2020. He received the honor jointly with the US astronomer Andrea Ghez for the discovery of a supermassive compact object at the center of our galaxy, the Milky Way.

Academic and Professional Career

- since 1999 Full Professor of Physics, University of California, Berkeley, USA
- 1987 - 1999 Visiting Professor, University of California, Berkeley, USA
- since 1988 Honorary Professor at the Ludwig-Maximilians-University Munich, Germany
- since 1986 Director at the Max Planck Institute for Extraterrestrial Physics in Garching, Germany
- 1985 - 1986 Full Professor, University of California, Berkeley, USA
- 1981 - 1985 Associate Professor, University of California, Berkeley, USA
- 1980 - 1982 Miller Fellow, University of California, Berkeley, USA
- 1978 - 1980 Post-Doc at the Harvard-Smithsonian Center for Astrophysics in Cambridge, MA, USA
- 1978 PhD at the Max Planck Institute for Radio Astronomy in Bonn on interstellar maser, Germany
- 1975 Diploma in Physics at the Institute for Physics and Astronomy at the University of Bonn, Germany

Functions in Scientific Societies and Committees (Selection)

- since 2021 Vice Chancellor of the Orden Pour le Mérite für Wissenschaften und Künste
since 1986 Member of the Scientific Board of the Max Planck Society

Project Coordination, Membership in Collaborative Projects (Selection)

GRAVITY - an adaptive optics assisted, near-infrared VLTI instrument for precision narrow-angle astrometry and interferometric phase referenced imaging of faint objects

Honours and Awarded Memberships

- 2020 Nobel Prize for Physics (together with Andrea Ghez)
2014 Honorary doctorate (Dr. h.c.), Observatoire de Paris (OBSPM), France
2014 Grand Cross of Merit with Star of the Order of Merit of the Federal Republic of Germany
2014 Herschel Medal of the Royal Astronomical Society (RAS), London, UK
2014 Harvey Prize
2013 Order of Pour le Mérite (OPLM), Bonn, Germany
2012 Crafoord Prize, Royal Swedish Academy of Science
2012 Tycho Brahe Prize, European Astronomical Society EAS
2011 Karl Schwarzschild Medal, Astronomical Society
2008 Shaw Prize, The Shaw Prize Foundation, Hong Kong
2007 Albert Einstein Medal of the Albert Einstein Society, Switzerland
2003 Balzan Prize for Infrared Astronomy
2003 Stern-Gerlach Medal for Experimental Physics, German Physical Society
since 2002 Member of the National Academy of Sciences Leopoldina
1990 Gottfried Wilhelm Leibniz Prize of the German Research Foundation
1986 Newton Lacy Pierce Prize for Astronomy, American Astronomical Society
1984 Presidential Young Investigators Award, National Science Foundation
1980 Otto Hahn Medal of the Max Planck Society

Research Priorities

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To study the structure and dynamics of such objects, Genzel and his colleagues have developed a number of new observation techniques and instruments in the fields of infrared, submillimeter and millimeter astronomy. They have thereby succeeded in dramatically improving sensitivity and angular resolution, especially for infrared instruments. Such measuring devices, stationed both on earth and in space, are among the most successful of their time.

With these instruments, Genzel is pursuing a particular observation strategy: Instead of statistical investigations of many objects, the goal is to use a variety of methods to gain a detailed physical understanding of a select few representative sources and thereby specifically investigate some key questions.

Genzel and his colleagues were able to prove through 20 years of award-winning observations that a black hole with 4.3 million solar masses exists at the center of our Milky Way. They thus succeeded in providing the most substantial empirical evidence to date for the existence of black holes, which had been postulated by Albert Einstein at the beginning of the 20th century as part of the general theory of relativity.