

CURRICULUM VITAE

Prof. Rashid A. Sunyaev

Birth date: March 1, 1943
Place of birth: Tashkent, Uzbekistan, USSR
Family status: married to Gyusal Sunyaev born in Tashkent, USSR; has three sons and one daughter; all born in Moscow (1971, 1978, 1981 and 1988)

Work addresses:

Max-Planck-Institut für Astrophysik

Karl-Schwarzschild-Str. 1
85748 Garching
Germany

Phone: 49/89 / 30000-2244
Fax: 089 / 30000-2899
E-Mail: sunyaev@mpa-garching.mpg.de

Space Research Institute (IKI)

of Russian Academy of Sciences
84/32 Profsoyuznaya Str,
117997, Moscow, Russia

Phone: 007/495/333-3373
Fax: 007/495/333-5377
E-Mail: sunyaev@iki.rssi.ru

Education and scientific degrees:

1950 – 1960 school number 18, Tashkent
1960 - 1966 student of Moscow Institute of Physics and Technology
1966 - 1968 Ph.D. student at Moscow Institute of Physics and Technology
1968 Candidate of Sciences - (equivalent of Ph.D.) degree from Moscow State University (astrophysics)
1973 Doctor of Sciences (astrophysics), degree from Moscow University. This degree is required in Russia to become a full professor.
1987 Professor of Astrophysics (title presented by the Superior Attestation Commission of the USSR Council of Ministers)

Positions:

1968 - 1971 Junior Scientific Researcher, Institute of Applied Mathematics, USSR Academy of Sciences, Moscow
1971 - 1974 Senior Scientific Researcher, Institute of Applied Mathematics, USSR Academy of Sciences, Moscow
1974 - 1982 Head of the Laboratory of Theoretical Astrophysics, Space Research Institute, USSR Academy of Sciences, Moscow
1975 - 2001 Assistant and then Full Professor of Moscow Institute of Physics and Technology
1982 - 2002 Head of the High Energy Astrophysics Department, Space Research Institute, Russian Academy of Sciences
1992 -- Chief Scientist, Space Research Institute, Russian Academy of Sciences
1995 -- Scientific Member of Max-Planck Institute for Astrophysics
1996 - 2018 Director of the Max-Planck Institute for Astrophysics
2010 -- Maureen and John Hendricks Visiting Professor, Institute for Advanced Study, Princeton

Editorial Boards:

1985 -- Editor-in-Chief, Astronomy Letters
1979 - 2005 Editor-in-Chief, Astrophysics and Space Physics Reviews
1988 -- 2007 Member of Editorial Board, Space Science Reviews
1995 -- Member of Advisory Board on Astrophysics and Space Physics, Springer (previously Kluwer) Scientific Publishers

Specialization:

main field Theoretical astrophysics, cosmology, high energy astrophysics, X-ray astronomy, space research
other fields Interaction of matter and radiation under astrophysical conditions

Professional Honors, Awards:

1989	Bruno Rossi Prize, American Astronomical Society
1991	Basic Sciences Award of International Academy of Astronautics
1991	John Lindsay Memorial Award for Science from NASA Goddard Space Flight Center
1995	Gold Medal of the Royal Astronomical Society
1995	Robinson Prize in Cosmology from Newcastle University
1998	Sir Massey Gold Medal and Award from the Royal Society and COSPAR
2000	Catherine Bruce Gold Medal from the Astronomical Society of Pacific
2000	State Prize of Russia for scientific results of the GRANAT Orbital Observatory (observations of black holes and neutron stars)
2002	Alexandr Friedmann Prize in Gravitation and Cosmology from Russian Academy of Sciences
2003	Heineman Prize in Astrophysics from American Astronomical Society and American Institute of Physics
2003	Gruber Cosmology Prize from Peter Gruber Foundation and International Astronomical Union
2008	Crafoord Prize in Astronomy from the Royal Swedish Academy of Sciences
2008	Henry Norris Russell Award, American Astronomical Society
2008	Karl Schwarzschild Medal, German Astronomical Society
2009	King Faisal International Prize for Science (Physics)
2009	Antoinette de Vaucouleurs Medal, University of Texas, Austin
2010	Order of Merit of the Federal Republic of Germany
2011	Kyoto Prize, Inamori Foundation
2012	Benjamin Franklin Medal in Physics, Franklin Institute, Philadelphia
2013	Order of Merit of Republic of Tatarstan, Russia
2013	Gold Medal of the Tatarstan Academy of Sciences (Kazan, Russia)
2014	Einstein Professor of the Chinese Academy of Sciences
2015	Eddington Medal of the Royal Astronomical Society
2015	Yakov Zeldovich Gold Medal of Russian Academy of Sciences
2016	Oskar Klein Medal, Royal Swedish Academy of Sciences and Stockholm University
2017	State Prize of Russia for Science and Technology (for the theory of disk accretion onto black holes and neutron stars)

Membership in Academies:

1984 - 1992	Corresponding member of USSR Academy of Sciences
1992 --	Full member of the Russian Academy of Sciences
1991 --	Foreign Associate of USA National Academy of Sciences
2009 --	Foreign Member of the Royal Society (London)
2003 --	Member of the German National Academy of Sciences "Leopoldina"
2004 --	Member of the Royal Netherlands Academy of Arts and Sciences
1995 --	Scientific Member of the Max-Planck Society
1991 --	Member of Academia Europaea
1991 --	Honorary Member, Tatarstan Academy of Sciences, Kazan, Russia
1992 --	Foreign Associate of American Academy of Arts and Sciences, Boston

Membership in Professional Societies:

1968 --	Member of International Astronomical Union
1986 - 1994	COSPAR (ICSU Committee on Space Research) vice-president
1991 --	Member of European Astronomical Society

1991 - 1993	Vice-president of European Astronomical Society
1992 --	Honorary member of American Astronomical Society
1993 --	Member of the American Physical Society
1993 --	Foreign Fellow of the Royal Astronomical Society
2007 --	International Member of the American Philosophical Society

Visiting and Honorary positions; Lecturerships:

1990 - 1994	Adjunct Professor of Columbia University
June 1992	Visiting Professor of University of Virginia
July 1992	Visiting Scientist of Harvard-Smithsonian Center for Astrophysics
December 1992	Regent Professor of the University of California, Berkeley
1990 --	Honorary member of Bashkortostan Academy of Sciences
July - August 1993	Fairchild Distinguished Scholar of California Institute of Technology
June, December 1993, May 1994, April 1995	Bearden Distinguished Professor of the Johns Hopkins University
1999 --	Honorary Professor of Ludwig-Maximillan University, Munich
2000 --	Honorary Professor of Kazan State University, Russia
October - December 2001,	Gordon Moore Distinguished Scholar of California Institute of Technology
April, December 2003	
February 2002	Scott Lecturer, Cavendish Laboratory, Cambridge University
May 2002	Bruno Rossi Lecturer, Massachusetts Institute of Technology
April 2004	Oort Professor, Leiden University
March 2005	Sackler Lecturer on Astrophysics, Harvard University
March - April 2005	Visiting scientist, Institute for Advanced Study, Princeton
April 2005	Bishop Lecturer on Astrophysics, Columbia University
October 2005	Karl Jansky Lecturer, National Radioastronomy Observatory
May 2006	Sackler Lecturer on Astrophysics, University of Toronto
May 2006	Conferenza Lincea Schiaparelli, Accademia Nazionale dei Lincei (Rome)
February 2007	Bose Lecturer, S.N. Bose National Center of Basic Sciences, Calcutta
November 2008	Loeb Lecturer, Physics Department, Harvard University
January 2009	Stanford University Physics Colloquium
March 2009	Niels Bohr Lecturer, Niels Bohr Institute, Copenhagen
October 2010	Tom Gold Lecturer, Cornell University
October 2011	John Bahcall Lecturership, National Air and Space Museum; Space Telescope Science Institute; Goddard Space Flight Center
April 2012	Sackler Lecturer on Astrophysics, Princeton University
January 2013	Bohdan Paczynski Lecture, Copernicus Astronomical Center, Warsaw
October 2013 --	Honorary member of the Ioffe Physical-Technical Institute in Saint Petersburg
November 2013	Distinguished lecture series at the Lewiner Institute for Theoretical Physics of the Technion, Haifa, Israel
July 2014	Lodewijk Woltjer Lecture, European Astronomical Society, EWASS, Geneva
Febr. 2016	Oskar Klein Memorial Lecture, Stockholm University
Oct. 2016	Mohler Prize Lecture, University of Michigan, Ann Arbor
Sept. 2016	Special Invited Lecture, Uzbekistan Academy of Sciences
Jan. 2017	Colloquium Lecture, Weizmann Institute of Science, Israel

Rashid Sunyaev's scientific papers have 66 700 citations according to the NASA Astrophysics Data System (ADS); Hirsch-index - 108. One paper (N.I. Shakura, R.A. Sunyaev, 1973) has 8500 citations and is the most cited paper in the world theoretical astrophysics. In 2017 he was included into the list of the Clarivate Citation Laureates (Thomson Reuters Citation Laureates till October 2016) in the field of Physics. In the astrophysical scientific papers and books it is common to use terms: Shakura-Sunyaev standard theory of the disk accretion and Sunyaev-Zeldovich effect (both thermal and kinematic).

Rashid Sunyaev was a PI of the Soviet orbital observatories with broad international participation such as GRANAT and Rentgen on the KVANT module of the MIR

space station. He is leading Russian participation in the Integral Hard X-Ray and Gamma-Ray orbital Observatory (European Space Agency, Russian Proton launch). He was one of the Co-PIs of the High Frequency Instrument of the cosmological Planck Spacecraft. Now he is leading in Russia the Spectrum-X project, with two grazing incidence X-Ray telescopes created in Germany (eRosita) and Russia (ART-XC), planned for the launch in 2019 into the second Lagrange Point of the Sun-Earth system. Main goal of the mission is the all sky survey in X-Rays able to map up to 3 million of accreting supermassive black holes in the Active Galactic Nuclei and discover all massive clusters of galaxies in the observable Universe (~ 150 000).