

CURRICULUM VITAE

Alexei A. Starobinsky

Born: April 19, 1948, Moscow, USSR

M.S.: 21 January 1972, from the Physics Department, Moscow State University

Ph.D.: 14 November 1975, from the Landau Institute for Theoretical Physics, USSR (now Russian) Academy of Sciences

Supervisor for M.S. and Ph.D.: Academician Ya.B. Zeldovich

Research Positions

- May 1975 - August 1990 — Research Scientist, Senior Research Scientist in the Landau Institute for Theoretical Physics, USSR Academy of Sciences, Moscow - Chernogolovka, USSR
- August 1990 - June 1997 — Head of the Department of Gravity and Cosmology and Leading Research Scientist, Landau Institute for Theoretical Physics, Moscow - Chernogolovka, Russia
- Since June 1997 by now — Principal Research Scientist, Landau Institute for Theoretical Physics, Russian Academy of Sciences, Moscow - Chernogolovka, Russia
- March - September 1991 — Visiting Professor, Ecole Normale Supérieure, Paris, France
- November 1993 - September 1994 — Visiting Professor, Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan
- August 2000 - February 2001 — Visiting Professor, Research Center for the Early Universe, University of Tokyo, Tokyo, Japan
- September 2005 - August 2008 — Guest Professor, Inter-University Center for Astronomy and Astrophysics, Pune, India
- September 2006 - December 2006 — Visiting Professor, CNRS, Institut Henry Poincaré, Paris, France
- March 2007 - June 2007 — Visiting Professor, Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan

- Since April 2007 by now — part-time Leading and now Principal Research Scientist, Laboratory of Theoretical Physics, Joint Institute for Nuclear Research, Dubna, Russia
- December 2008 - March 2009, October 2010 - March 2011, January 2012 - March 2012, November 2012 - January 2013, October 2013 - November 2013, March 2015, November 2015, February 2017, December 2017 — Visiting Professor, Research Center for the Early Universe, University of Tokyo, Tokyo, Japan
- November 2014 - June 2015 (3 months) — Visiting Professor, Institute of Theoretical Physics, Faculty of Science, Utrecht University, Netherlands
- November 2016 — Guest Senior Researcher, Waseda Institute for Advanced Study, Waseda University, Tokyo, Japan
- Since September 2017 by now — part-time Professor, Faculty of Physics, National Research University Higher School of Economics, Moscow, Russia

Administrative Positions

- March 1987 - August 1990 — Science Secretary of the Landau Institute for Theoretical Physics
- May 1990 - June 1990, May 1991 - June 1991 — Co-Director of the USSR-USA Summer Programme for Young Investigators in Cosmology 1990 & 1991 (jointly with K. Thorne in 1990 and D. Schramm in 1991)
- July 1999 - June 2003 — Deputy Director of the Landau Institute for Theoretical Physics, Moscow, Russia

Scientific Awards and Fellowships

- Russian State Distinguished Scientific Fellowship — 1994 - 1997
- The A. A. Friedmann Prize for Research in Gravity and Cosmology from the Russian Academy of Sciences — 1996
- Correspondent Member of the Russian Academy of Sciences — elected 30.05.1997
- Prize of the International Academic Publ. Co. "Nauka/Interperiodica" for the best work of the year published in its journals — 2004

- The Tomalla Prize for extraordinary contributions to General Relativity and Gravity from the Tomalla Foundation for Gravity Research (Switzerland) — 2009
- The Outstanding Referee for the journals of the American Physical Society Award — 2010
- Member of the German Academy of Sciences Leopoldina – the German National Academy of Sciences — elected 24.03.2010
- The Oscar Klein Medal from the Royal Swedish Academy of Sciences and the Stockholm University — 2010
- Full Member of the Russian Academy of Sciences — elected 22.12.2011
- The Amaldi Medal from SIGRAV (Italian Society for General Relativity and Gravitational Physics) — 2012
- The Honorary Professor of the Bashkir State Pedagogical University, Ufa, Russia — 2012
- The Gruber Cosmology Prize from the Gruber Foundation, USA — 2013
- The A. A. Friedmann Medal from the Perm State University, Perm, Russia — 2013
- Foreign Fellow of the National Academy of Sciences, India (Allahabad) — 2013
- The 2014 Kavli Prize in Astrophysics from the Norwegian Academy of Science and Letters, the Norwegian Ministry of Education and Research and the Kavli Foundation — 2014
- Member of the Norwegian Academy of Science and Letters — elected 29.05.2014
- Doctor Honoris Causa from the Kazan Federal University, Kazan, Russia — 2014
- Gold A. D. Sakharov Medal from the Russian Academy of Sciences — 2016
- Foreign Fellow of the Indian National Science Academy (New Delhi) — since 01.01.2017
- Foreign Associate of the US National Academy of Sciences — elected 02.05.2017
- d'Officier dans l'Ordre national des Palmes Academics, France — 2017

Membership in National and International Societies and Committees

- Member of the Committee of the International Society on General Relativity and Gravitation (elected) — 1989 - 1997, 2011 - 2019
- IUPAP Representative of the International Society of General Relativity and Gravitation — 2004 - 2010
- Member of the Astronomy panel of the Long-Term Research Grants Program of the International Science Foundation — 1993 - 1994
- Member of the American Physical Society — since 2001, Fellow — since 2011
- Vice President of the Council of the BRICS-AGAC Association of Gravity, Astrophysics and Cosmology — since 2016
- President of the Russian Gravitational Society — elected 27.06.2017

Membership in Editorial Boards of Scientific Journals

- General Relativity and Gravitation — 1989 - 1997
- JETP Letters (Russia) — since 1991
- Astronomy Letters (Russia) — since 1992
- International Journal of Modern Physics D — since 1992
- Classical and Quantum Gravity — 1993 - 1996, and the member of the CQG Advisory Panel since 2011
- Gravitation and Cosmology (Russia) — since 1994
- Physical Review D — 2001 - 2003
- Journal of Cosmology and Astroparticle Physics — since 2002
- European Physical Journal C (Theoretical Physics II) — since 2012
- Physics of Elementary Particles and Atomic Nuclei (Russia) — since 2012
- Modern Physics Letters A — since 2013
- SIGMA (Symmetry, Integrability and Geometry: Methods and Applications) — since 2014

AREAS OF PREVIOUS RESEARCH

- Particle creation in cosmology (1972 - 1977).
- Wave amplification and particle creation by rotating black holes (1973 - 1974).
- Observational tests of PBH (1976 - 1979).
- Stability of Cauchy horizons (1979 - 1980).
- Inflation, including first observational test of inflation (1979).
- First self-consistent model of inflation based on the $(R + R^2)$ gravity (1980).
- Theory of generation of adiabatic perturbations during inflation (1982).
- Fluctuations of the temperature of cosmic microwave background radiation (1983 - 1988, 1992 - 1995).
- Stochastic inflation (1984 - 1986, 1994, 2015).
- Multiple inflation (1985, 1992 - 1994).
- Cold dark matter model with the cosmological term (1985).
- Cold + hot dark matter cosmological models (1993 - 1995).
- Features in the primordial spectrum of adiabatic perturbations (1992, 2014 - 2018).
- Theory of reheating after inflation (1994 - 1997).
- Quantum-to-classical transition in cosmology (1996 - 1998, 2007).
- Dark energy in the Universe: theoretical and observational investigation of its properties (1998 - 2000, 2003 - 2004, 2006 - 2009, 2012 - 2018).
- Trans-Planckian particle creation in cosmology (2001 - 2002, 2007).
- Cosmology with tachyon matter (2002).
- ARCHEOPS collaboration (measurement and investigation of CMB temperature fluctuations in the ARCHEOPS experiment) (2002 - 2004).
- Scalar-tensor and $f(R)$ models of dark energy (2000, 2006 - 2007, 2009 - 2011, 2017).
- Higgs inflation (2008 - 2009, 2012).

- Generalization of inflationary models in modified gravity to supergravity (2011 - 2012).
- Sterile neutrino and $f(R)$ models of dark energy (2013 - 2015).
- Non-local UV generalizations of gravity (2016 - 2018).
- Constant-roll inflation (2015 - 2017).