

Yaroslav A. ILYUSHIN
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- Birth date and place:** August 26, 1970 in Moscow, USSR
- Education:** 1993 – graduated from Physical Faculty, Moscow State University
1996 – Ph.D. in Physics and Mathematics (Radio Physics)
2017 – D.Sc. in Physics and Mathematics (Radio Physics)
- Institution:** Moscow State University, Physics Faculty
- Address:** Physical Faculty Moscow State University 119992 GSP-2 Leninskie gory
Moscow Russia
- Phone:** +7-095-939-3252 (office) +7-910-425-3664 (mobile)
- Position:** Associate professor
- Employment:**
- Research fellow at Physical Faculty, Moscow State University (1996 – 1997)
 - Assistant professor at Physical Faculty, Moscow State University (1997 – 2005)
 - Associate professor at Physical Faculty, Moscow State University (2005 – up to now)
 - Senior research scientist at the All-Russian Research Institute for Optical and Physical Measurements, Moscow (2014 – 2015)
 - Research scientist at the Kotel'nikov Institute of Radioengineering and Electronics, Moscow (2012 – up to now)
 - Assistant professor at the Moscow State University of Mechanical Engineering, Moscow (1996-1997)
- Research interests:** Wave propagation in inhomogeneous and random media; radar science; radiative transfer theory; computational electrodynamics.
- Grants and awards:**
- Presidential Stipendium of Russian Federation for Young Scientists (1998)
 - Research Stipendium von Deutsch Academic Austauschdienst (1999)
 - Max Planck Gesellschaft Stipendium (2000-2001)

Stipendium of the Fund of V.O. Potanin for young educators (2003)

Research Stipendium von Deutsch Academic Austauschdienst (2015)

Grants from Russian Fundamental Research Fund 02-05-74504, 03-05-06301, 06-05-64988, 08-02-08554

Academic stays:

February – April 2000 – Max-Planck-Institut für Aeronomie, Lindau-Katlenburg. CONSERT/ROSETTA experiment studies

September 2000 – November 2001 – Max-Planck-Institut für Aeronomie, Lindau-Katlenburg. Max-Planck-Gesellschaft research fellowship. Research work for MARSIS radar experiment

March 2014 – European Space Research and Technology Center
MARSIS experiment data analysis

September 2014 – Max-Planck-Institut für Sonnensystemforschung, Göttingen
Jovian icy moons radar studies for JUICE interplanetary mission

October – December 2015 – Max-Planck-Institut für Sonnensystemforschung, Göttingen
Jovian icy moons radar studies for JUICE interplanetary mission

October – December 2016 – Max-Planck-Institut für Sonnensystemforschung, Göttingen
Jovian icy moons radar studies for JUICE interplanetary mission

November – December 2017 – Max-Planck-Institut für Sonnensystemforschung, Göttingen
Jovian icy moons radar studies for JUICE interplanetary mission

November – December 2018 – Max-Planck-Institut für Sonnensystemforschung, Göttingen
Jovian icy moons radar studies for JUICE interplanetary mission

International research teams membership:

International research team on Martian polar science led by K. Fischbaugh. International institute of Space Science, Bern (2008-2009)

International research team on remote sensing of atmospheric aerosol from space led by Alexander Kokhanovsky. International institute of Space Science, Bern (2012-2014)

Teaching experience:

Numerical techniques in geophysics.

Moscow State University, Physical department. Course of lectures for graduate students (1999)

Radiative transfer theory.

Moscow State University, Physical department. Course of lectures for graduate students (since 2014 – up to now)

Learning textbooks:

Computational techniques in geophysics and ecology. Wavelet analysis theory and applications. 1999 (in Russian)

Fading of short wave radio signals in the ionosphere. Practical guide for laboratory exercises. 2009 (in Russian)

Models of fluctuating radio channels. 2009 (in Russian)

Coherent backscattering enhancement and weak localization of waves in random media. 2009 (in Russian)

Editorial board membership:

Member of the editorial board of scientific journal “**Radio electronics, nanosystems and information technologies**” (in Russian)

Peer review:

Reviewer of scientific papers in “**Journal of atmospheric and solar-terrestrial physics**”, “**Planetary and space science**”, “**Journal of quantitative spectroscopy and radiative transfer**”, “**Journal of the Optical Society of America A**”

Scientific publications:

Over 50 research papers in peer-reviewed journals

Selected conference talks:

Fluctuations of the GPS signals on the tangential paths in the low terrestrial atmosphere: influence of the small-scale structure. Oral presentation at the General Assembly of European Geosciences Union (EGU) Vienna, Austria, 2007

Ionospheric scintillations: impact on the subsurface radar sounding. Oral presentation at XXIX General Assembly of the Union Radio Scientifique Internationale (URSI) Chicago, USA, 2008

The advanced small angle approximation with application to the numerical radiative transfer calculations. Poster presentation at the International Radiation Symposium (IRS) Berlin, Germany, 2012

Three-dimensional inhomogeneous rain fields: implications for the distribution of intensity and polarization of the microwave thermal radiation. Poster presentation at 40th COSPAR Scientific Assembly. Moscow, Russia, 2014.

Active and passive microwave sounding: millimeter wave radiative transfer in natural rain medium. Oral presentation at the International Radiation Symposium (IRS), Auckland, New Zealand, 2016

Personal interests

Amateur radio

