

Rinat Tagirov

RESEARCH ASSOCIATE

Imperial College London, Blackett Laboratory (Astrophysics Group), Prince Consort Road, London SW7 2AZ, UK

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Education

ETH Zürich

DOCTOR OF SCIENCES

- Thesis Title: Physical Understanding of Solar Irradiance in UV and Radio Wavelengths.
- Scientific Advisors: Dr. Alexander Shapiro, Prof. Dr. Werner Schmutz

Zürich, Switzerland

Sep. 2011 - Oct. 2016

Saint-Petersburg State University

SPECIALIST DIPLOMA IN ASTRONOMY

- Thesis Title: Physical Conditions in Molecular Clouds at High Redshifts.
- Scientific Advisor: Dr. Alexandre Ivanchik

Saint-Petersburg, Russia

Sep. 2006 - Jun. 2011

Skills

Science

Numerical Radiative Transfer, NLTE effects, Solar Irradiance Modeling

Programming

Fortran, Python, Linux, LaTeX, IDL

Languages

Russian (native), English (fluent), German (basic)

Experience

Imperial College London

RESEARCH ASSOCIATE

London, UK

Oct. 2016 — PRESENT

Physical-Meteorological Observatory Davos

PHD STUDENT

Davos, Switzerland

Sep. 2011 — Sep. 2016

Ioffe Physical-Technical Institute

RESEARCH ASSISTANT

- Physics of interstellar medium in the early Universe

Saint-Petersburg, Russia

Sep. 2010 - Jun. 2011

Teaching

Faculty of Natural Sciences

FIRST YEAR COMPUTATIONAL PROJECT SUPERVISOR (4 STUDENTS, 2 PROJECTS)

- Project #1: Modeling airplane boarding process using statistical mechanics
- Project #2: Modeling rainbow formation

Imperial College London

Mar. 2018 — PRESENT

Faculty of Natural Sciences

FIRST YEAR COMPUTATIONAL PROJECT SUPERVISOR (2 STUDENTS, 1 PROJECT)

- Project: Identification and study of solar active regions using HMI/SDO images

Imperial College London

Mar. 2017 — June 2017

Department of Mechanical Engineering

LABORATORY PRACTICUM ASSISTANT

- Laboratory experiment practice instruction and supervision

ETH Zürich

Sep. 2013 — Dec. 2014

Department of Physics

PHYSICS III COURSE ASSISTANT

- Exercise classes on optics, statistical mechanics and quantum mechanics

ETH Zürich

Oct. 2012 — Feb. 2013

Department of Physics

PHYSICS II COURSE ASSISTANT

- Exercise classes on classical mechanics

ETH Zürich

Feb. 2012 — May 2012

- R. V. Tagirov, A. I. Shapiro and W. Schmutz
NESSY: NLTE spectral synthesis code for solar and stellar atmospheres
Astronomy & Astrophysics, 603, A27
- G. Thuillier, P. Zhu, A. I. Shapiro, S. Sofia, R. V. Tagirov, M. van Ruymbeke and W. Schmutz
Solar disk radius determined from observations made during eclipses by bolometric and photometric instruments on-board the PICARD satellite
Astronomy & Astrophysics, 603, A28
- J. Gröbner, S. Kazadzis, N. Kouremeti, L. Doppler, R. V. Tagirov, and A. I. Shapiro
Spectral solar variations during the eclipse of March 20th 2015 at two European sites
American Institute of Physics Conference Proceedings, 1810, 1

- G. Cessateur, ..., R. V. Tagirov, et al.
Solar irradiance observations with PREMOS filter radiometers on the PICARD mission: In-flight performance and data release
Astronomy & Astrophysics, 588, A126

- A. I. Shapiro, S. K. Solanki, N. A. Krivova, R. V. Tagirov and W. K. Schmutz
The role of the Fraunhofer lines in solar brightness variability
Astronomy & Astrophysics, 581, A116

Presentations

Sun-climate group seminar of Max-Planck-Institute for Solar System Research

MPS, Göttingen, Germany

INVITED TALK

Nov. 2015

Fixing Δ -Iterations in the NESSY code

Solar Metrology: Needs and Methods

Paris, France

CONFERENCE POSTER

Oct. 2014

Fast NLTE radiative transfer numerical scheme for solar spectrum modeling

Davos Atmosphere and Cryosphere Assembly (DACA-13)

Davos, Switzerland

CONFERENCE POSTER

Jul. 2013

Analysis of the solar eclipses observed with PREMOS/PICARD

8th European Space Weather Week

Namur, Belgium

CONFERENCE SPLINTER-SESSION TALK

Nov. 2011

Analysis of the solar eclipses observed with PREMOS/PICARD

References

Dr. Yvonne Unruh

SENIOR SCIENTIST, LECTURER

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Blackett Laboratory, Astrophysics Group

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Dr. Alexander Shapiro

SENIOR SCIENTIST

Max-Planck Institute for Solar System Research

Department Sun and Heliosphere

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