PERSONAL INFORMATION

Name and title: Univ.-Prof. Dr. Alexander Shapiro

Date of birth: 17th March 1982

EDUCATION

- 2009 Doctorate (PhD) in Physics, ETH Zürich, Switzerland; Thesis title: "Molecular processes and turbulent magnetic fields in the solar atmosphere"; advisers: Prof. Svetlana Berdyugina and Prof. Jan Stenflo;
- 2004 Diploma (equivalent to Masters degree) in math and astronomy with honor, St.-Petersburg State University, Russia; adviser: Prof. Vsevolod Ivanov.

POSITIONS

2023

- Full Professor and the head of the stellar astrophysics research division at the Institute of Physics, University of Graz;
- 2017 Leader of the SOLVe Research Group at Max Planck Institute for Solar System Research (MPS), Germany;
- 2014 2016 Marie Curie Fellow at MPS;
- 2008 2014 Postdoc at Physikalisch-Meteorologisches Observatorium Davos / World Radiation Center (PMOD/WRC), Switzerland;
- 2004 2008 PhD student at the Institute of Astronomy, Swiss Federal Institute of Technology (ETH), Zürich, Switzerland.

Synergy Grant from the European Research Council;

FELLOWSHIPS AND AWARDS (selection)

2021	Max Planck Society Grant to maintain funding of my ERC group (602 kEuro);
2016	Starting Grant from the European Research Council;
2013	Marie Curie Intra-European Fellowship (application ranked in top 3% in Physics);
2000, 2002	Soros fellowships for undergraduate students;
1996 - 1998	First, second, and third prizes at highly prestigious All-Russian Olympiads in astronomy, physics and mathematics among high-school students; overall winner of Saint-Petersburg city Olympiads in physics (5 times), astronomy (4 times), and math (2 times).

SCIENTIFIC INTERESTS

- Magnetic activity of the Sun and cool stars;
- Star-planet connection;
- Numerical simulations of stellar and planetary atmospheres;
- Characterisation of exoplanets;
- Radiative transfer;
- Climatology.

PUBLICATIONS

• 96 refereed publications in leading international peer-reviewed journals, e.g. Science (2), Nature Astronomy (3), Nature Communications (1), Astronomy and Astrophysics, Astrophysical Journal, Geophysical Research Letters, Atmospheric Chemistry and Physics) (ADS Publications refereed);

- 1 book chapter + 13 non-refereed publications (<u>ADS Publications not-refereed</u>);
- Google Scholar profile <u>Shapiro Google Scholar</u>;

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 2017 now Main supervisor of 6 postdocs, 4 PhD-students, 2 MSc- and 2 BSc-students;
- 2011 2014 Day-to-day supervisor of 3 PhD-students at ETH (in Switzerland only professors are allowed to act as official supervisors) and 1 postdoc at PMOD/WRC.

LEADERSHIP POSITIONS AND INSTITUTIONAL RESPONSIBILITIES (SELECTION)

- 2019 2022 Leader of the International Space Science Institute (ISSI) Team 446 "Linking Solar and Stellar Variabilities";
- 2020 2021 Member of Expert Working Group on Astrophysics. ESA's Directorate of Human and Robotic Exploration;
- 2020 2021 Co-leader of the subgroup "Stellar Photospheric Heterogeneities" in NASA Study Analysis Group 21 "The Effect of Stellar Contamination on Space-based Transmission Spectroscopy";
- 2015 2020 Leader of the ESA's Topical Team "SOLAR mission";
- 2015 2020 Co-chair of the International Astronomical Union (IAU) Commission E1 Working Group "Solar Irradiance".

PARTICIPATION IN SCIENTIFIC MEETINGS

- 31 <u>invited</u> oral presentations and reviews at international conferences. Examples:
 - Invited Keynote Talk at 2022 Sun-Climate Symposium, Madison, USA, 2022;
 - Invited Talk at International Workshop Observing the Sun as a Star: Would we find the solar system if we saw it?, Göttingen, Germany, 2018;
 - Invited Talk at <u>14th Quadrennial Solar-Terrestrial Physics Symposium</u>, Toronto, Canada, 2018;
 - Invited Review at <u>IAU Symposium No. 340: Long Term Datasets for the Understanding of Solar and Stellar Magnetic Cycles</u>, Jaipur, India, 2018;
 - Invited Talk at <u>IAU Symposium No. 328: Living around Active Stars</u>, Maresias, Brazil, 2016;
 - Invited Review at First VarSITI General Symposium, Albena, Bulgaria, 2016;
 - Invited Talk at <u>Second SOLARNET Meeting on "Solar and stellar magnetic activity"</u>, Palermo, Italy, 2015.
- Over 20 oral contributed presentations;
- Over 10 <u>invited</u> seminar talks.

ORGANIZATION OF INTERNATIONAL SCIENTIFIC MEETINGS

- 2024 SOC member of the International Astronomical Union Symposium 400, 'Solar and Stellar Multi Scale Activity', Medellin, Columbia
- 2024 SOC member of the 'Sun, Space Weather and Solar-Stellar Connections'. An international conference commemorating 125 years of Kodaikanal Solar Observatory, Bengaluru, India
- 2020 Proposer and SOC member of the selected Splinter Session "Modeling stellar atmospheres: advances brought by solar know-how", at Cool Stars 21, Toulouse, France, cancelled due to COVID-19;
- 2018 Proposer and SOC member of the Splinter Session "Stellar Brightness Variations: building on the solar knowledge", at Cool Stars 20, Boston/Cambridge, USA, ~100 participants;

- 2018 SOC co-chair of the Focus Meeting 9, "Solar Irradiance: Physics-Based Advances", at XXX International Astronomical Union (IAU) General Assembly, Vienna, Austria, ~100 participants;
- 2016 SOC member of the Splinter Session "Magnetically-driven solar variability in the context of Sun-like stars: peculiarities and common features", at Cool Stars 19, Uppsala, Sweden, ~50 participants;
- 2015 SOC co-chair of the Focus Meeting 13, "Brightness Variations of the Sun and Sun-like Stars", at XXIX IAU General Assembly, Honolulu, USA, ~100 participants;
- 2014 Co-convener (SOC member) of the session "Solar irradiance variability: Measurements, Models, Proxies, and Causes" at EGU General Assembly, Vienna, Austria, ~50 participants;
- 2013 Co-convener (SOC member) of the session "Solar and stellar variability: what can we learn from a joint effort?", EGU General Assembly, Vienna, Austria, ~50 participants;
- 2013 Co-convener (SOC member) of the session "Space weather in planetary systems", Tenth European Space Weather Week, Antwerp, Belgium, ~50 participants.