PERSONAL DETAILS:
Shuvalov Sergey Dimitrievich
Born 11 may 1993
shuvalovsergei@gmail.com

EDUCATION:
PhD in Physical and Mathematical Sciences (defended 8 June 2022)
Space Research Institute of the Russian Academy of Sciences (IKI)
Thesis: "Hot flow anomalies at Earth and Mars and structure of the dayside Martian magnetosphere"

Master of math and physics, July 2016
Moscow Institute of Physics and Technology
Thesis: "Analysis of ion distribution function near Hot Flow Anomaly detected by Cluster spacecraft"

Bachelor of math and physics, July 2014
Moscow Institute of Physics and Technology
Thesis: "Determining location and orientation of an underwater vehicle"

WORK EXPERIENCE
Research Scientist I in Laboratory for Atmospheric and Space Physics in CU Boulder (since June 2023)
- Scientist in MAVEN/LPW team

Junior researcher in Space Research Institute of the Russian Academy of Sciences (July 2017 – May 2023):
- Technical leader of an electron spectrometer instrument for Trabant spacecraft
- Perform scientific data analysis of NASA's MAVEN spacecraft
- Performed laboratory tests of an electron spectrometer prototype being developed for a small spacecraft

Engineer in Space Research Institute of the Russian Academy of Sciences (September 2016 – June 2017):
- Studied Martian exosphere based on NASA/MAVEN measurements

Senior assistant Space Research Institute of the Russian Academy of Sciences (sep 2014 – sep 2016):
- Developed data processing algorithm for the ARIES-L instrument for Luna-25 mission
- Perform scientific data analysis of Cluster (ESA) space experiment
- Participated in developing electro-optical scheme of a neutral particle detector for Luna-glob mission

PUBLICATIONS
Have 24 publications in peer-reviewed scientific journals, 4 of which are under 1st authorship. One additional publication under 1st authorship is being prepared.

AWARDS
2020 - "Best scientific work of the institute" in competition of scientific works of Space Research Institute for the paper "Properties and Sources of the Dayside Martian Magnetosphere" (http://www.iki.rssi.ru/comp/2020/)

2019 - "Best research conducted by young scientists" in competition of scientific works of Space Research Institute for the paper "Propagation properties of Hot Flow Anomalies at Mars: MAVEN observations" (http://www.iki.rssi.ru/comp/2019/)

PARTICIPATION IN GRANTS

- 2015-2016 RFBR № 16-32-00746 "Development and creation of a physical mock-up of electron spectrometer for studying fine aurora structures" – leader
- 2016-2018 RSF № 16-42-01103 "Erosion of the Martian atmosphere by solar wind scavenging. Theory and Coordinated Mars Express and MAVEN observations" – participant
- 2017-2022 RSF № 17-72-20134 "Development of a set of compact equipment for the diagnostics of cosmic plasma and monitoring of solar corpuscular radiation" – participant
- 2021-2023 RSF № 21-42-04404 "Venus and Mars in the solar wind. Comparative study" – participant

SKILLS:

Languages:
- Russian (native language)
- English (fluent)
- French (basic)

Software:
- Matlab, Python, C#
- IDL
- Simion/Lua
- Git