Borodina Olga

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Education

- Ural Federal University, UrFU (2015 – 2019)
    - > General Math (Calculus, Linear Algebra etc.) and Physics
    - > Astrophysics, Galactic Astronomy, Astrometry, Observational Astronomy, Celestial Mechanics etc.

- Moscow Institute of Physics and Technology, MIPT (2019 – 2020)
    - > B.S. in applied mathematics and physics (GPA **4.98/5.0**)
    - > Plasma physics, Quantum Mechanics, Statistics, Machine Learning

Experience

- **Teaching** astronomy at KantrSkrip school (2017 – 2019)
    - > High school students (levels from basic to advanced)
    - > Developed original course and educational approaches
    - > Trained all-Russia Astronomy contest winner (2019)

- **Internship** at Kourovka Astronomical Observatory (2018)
    - > Sun telescope (spectroscopic observations)
    - > Reflecting telescope, 70cm with multichannel photometer
    - > The MASTER-II-Ural telescope

- **Annual conferences** "Physics of Space", Ekaterinburg (2016 – 2019)
    - > Presentations (open clusters & binary stars using 2MASS and GAIA databases)
    - > Organization (contests, intellectual games, excursions etc. for > 100 attendees)
- **Institute of Astronomy, Russian Academy of Sciences**, INASAN (2019 – now)
    - > Department of physics of stellar systems (open clusters & binary stars using GAIA DR2)
    - > Laboratory for Research of Stars with Exoplanets (hot stars with exoplanets using KOI Table)

Skills

- **CS:** Python, C, TopCAT, MS Office (Excel, PowerPoint etc.), VCS (Git, GitHub), LaTeX
- **Languages:** Russian (native), English (fluent), Spanish (intermediate)
- **Strong soft skills:** teaching, organization, presentation, communication

Publications

- **Poster presentation** (2018): presentation of open cluster research team projects (link)
    - > Open clusters' radius and coordinates refinement
    - > Comparison of clusters' mass function based on 2MASS and GAIA DR1

- **Article** in the Astrophysical Journal (link)
    - > Developed state-of-the-art method of modeling binary stars
    - > Estimated the effect of unresolved binaries on the open clusters mass calculation

Interests in science

- Stellar & Galactic astronomy
- Astroinformatics