

Nikolina Milanović

Curriculum Vitae

Max Planck Institute
for Solar System Research
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nklm



Research interests

- › Astrophysical plasmas, observations and spectroscopy.
- › Heating of the upper solar atmosphere.

My PhD work is related to the dynamics and heating of the solar transition region and corona in connection to the magnetic field at the solar surface. I analyze observations acquired by different missions, including the Solar Orbiter, the Solar Dynamics Observatory, and IRIS. By combining spectroscopy and imaging data in the UV and extreme-UV radiation, I aim to understand the formation, thermal properties, and magnetic connectivity of different features in the quiescent solar corona – from diffuse-looking emission to highly-structured coronal bright points.

Education

- 11.2020 – current **PhD in Physics**, IMPRS for Solar System Science 
Max Planck Institute for Solar System Research, Göttingen, Germany
Technische Universität Braunschweig, Braunschweig, Germany
Topic Dynamics in the solar atmosphere related to the surface magnetic field
Supervisors: Prof. Dr. Hardi Peter, Dr. Lakshmi Pradeep Chitta
- 10.2018 – 09.2019 **MSc in Astronomy**
Department of Astronomy, Faculty of Mathematics, University of Belgrade, Serbia
Master Thesis Shock speed in nonradiative and radiative filaments in the supernova remnant Cygnus Loop
Supervisors: Dr. Milica Vučetić, Dr. Dušan Onić
- 10.2014 – 07.2018 **BSc in Astronomy**
Department of Astronomy, Faculty of Mathematics, University of Belgrade, Serbia

Publications

- › Milanović, N., Chitta, L.P., Peter, H., 2023. Diffuse solar coronal features and their spicular footpoints. *A&A* 673, A81. <https://doi.org/10.1051/0004-6361/202245544> 

Conferences and meetings

- 05.2023 **SOLARNET Conference**, *Poster*, Potsdam, Germany
09.2022 **8th Solar Orbiter Workshop**, *Poster*, Belfast, The United Kingdom
06.2022 **10th Coronal Loops Workshop**, *Contributed talk*, Paris, France
10.2021 **Hinode 14 / IRIS 11 Meeting**, *Contributed talk*, Online
09.2021 **16th European Solar Physics Meeting**, *Poster-talk*, Online
06.2019 **Supernova Remnants II**, *Poster*, Chania, Crete, Greece
05.2019 **Regional Student Astronomical Workshop**, *Contributed talk*, Nova Gorica, Slovenia

Internships and schools

- 2020 **Student Observational Workshop**, National Observatory Rozhen, Rozhen, Bulgaria
Observation of galaxies in H α and [S II] emission in search for supernova remnants; data reduction.
- 2019 **Summer internship**, Max Planck Institute for Solar System Research, Göttingen, Germany
Searching the Hinode SOT/SP database for sunspots with strongest magnetic fields on the Solar surface (with Dr. Sebastián Castellanos Durán, Dr. Björn Löptien and Dr. Andreas Lagg).
- 2018 **Summer School**, Ondřejov Observatory, Ondřejov, Czech Republic
Reduction of the optical stellar spectra (with Dr. Michaela Kraus).
- 2017 **Student Observational School**, Astronomical Station Vidojevica, Prokuplje, Serbia
Exoplanet transit light curve: data reduction and aperture photometry.

Skills

Computation

Python Anaysis and visualisation of astronomical spectroscopic and imaging data.

- Familiar with different standard and specialized packages, including numpy, scipy, matplotlib, sunpy, astropy, pfsspy, aiapy etc.

Languages

Serbian Native speaker
English Fluent (CEFR Level C1)
German Beginner (CEFR Level A2)

Teaching

- 2013 – 2020 **Seminar of Astronomy**, Petnica Science Center, Valjevo, Serbia
Organizing astronomy seminars and supervising research projects for highschool students.

Outreach

- 06.2023 **Max Planck Day**, Göttingen, Germany
Public outreach event on the 75th anniversary of the Max Planck Society.
- 2015 – 2017 **European Researchers' Night**, Belgrade, Serbia
Organizing astronomy-related public outreach event.

Other interests

- Classical ballet and contemporary dance classes. 🎭

Referees

Prof. Dr. Hardi Peter

Scientist
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Dr. Milica Vučetić

Research Associate
Faculty of Mathematics
University of Belgrade
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Dr. Lakshmi Pradeep Chitta

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Dr. Dušan Onić

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