Lazar Živadinović | Curriculum Vitae

Personal info

Date of birth: 20.12.1994.
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Education

University of Belgrade, Faculty of Mathematics, Department of Astronomy **Belgrade, Serbia**
Major in Astronomy and Astrophysics *2013 – present*

University of Belgrade, ICT college of applied studies **Belgrade, Serbia**
Major in Internet technologies *2019 – present*

Gymnasium "*General gymnasium - Kruševac*" **Kruševac, Serbia**
Natural Science class *2009 – 2013*

Publications and Conference Proceedings

Density profile of Milky Way: Comparison of dynamical model and Monte Carlo method for determining stellar space densities:

Živadinović L., Milošević S., Milić D. Serbian astronomical conference; Belgrade; Serbia; 2017; In preparation

Temperature distribution in Solar active region:

Živadinović. L.; Mentored by Milić I.; Proceedings of the 12th Petnica's annual conference; Petničke sveske; Petnica Science Center, Serbia; 2013;

Work and Research Experience

ITEkako D.O.O. **Belgrade, Serbia**
Dev-Ops *May 2017. - present*
- Work with continuous integration/continuous delivery tools
- Work with configuration management tools
- Hardware, VPS and network maintenance
- Monitoring and alerting systems

Astronomical Institute of the Czech Academy of Sciences **Ondrejov, Czech Republic**
Research Internship at SDSA group *21st July - 11th August, 2019*
- Research subject: **Timeseries of magnetic field propertis in active region in solar photosphere from creation to decay**
  Mentored by PhD Jan Jurcak
  - Pipeline for reduction and analysis of SDO/HMI SHARP datasets
  - Development of sunspot/pore detection and tracking algorithms

Max Planck Institute For Solar System Research **Göttingen, Germany**
Research Internship at SLAM gropu *4th July - 5th September, 2016*
- Research subject: **Time series of photospheric Poynting flux** mentored by PhD Pradeep Chitta
  - Rate of change of photospheric poynting flux induced by horizontal photospheric motions
  - Analysis of SST/CRISPEX spectropolarimetric data

Petnica Science Center **Valjevo, Serbia**
Junior Teaching Assistant *2014-Present*

- o Teaching assistant in astronomy department
  - Organization of seminars for high school students
  - Various lectures for high school students (calculus, statistics, error analysis, observational data reduction, solar physics, programming and scientific computing...)
  - Building 80cm radio telescope
  - Monte Carlo Radiative Transfer simulation of sunset and detectability of cyanobacteria in exoplanets atmospheres
  - Analysis of magnetic field in sunspot based on Fe I line pair and V stokes parameter
  - DSLR photometry on Delta Scutti variable stars
  - Data reduction pipeline for DSLR photometry
  - Maintenance of computation server

Petnica Science Center   **Valjevo, Serbia**
Participant and presenter at annual conference "Step into science"   *2012-2013*
- o Research subject: **Temperature distribution in Solar active region** mentored by Milić, I.
  - Data reduction of HINODE/SOT BFI data of Solar active region using SolarSoft library
  - Using MARCS synthetic stellar spectra for comparing intensities with reduced data from HINODE/SOT

Other relevant experiences, schools and workshops

10th Student astronomical workshop (SAR)   **Novi Sad, Serbia**
Talk on, "Poynting flux derived from photospheric motions"   *18th November 2017*

Advanced data mining with the Sloan Digital Sky Survey   **Belgrade, Serbia**
Workshop on databases structures and their usage in astronomy   *9rd- 11th July 2017*

Observational school, SVAP 2017   **Prokuplje-Belgrade, Serbia**
3 day education course on "AS Vidojevica" and remote observation with 60cm RC telescope   *1st-6thJune 2017*
Remote observation, photometry and data reduction

9th Student astronomical workshop (SAR)   **Belgrade, Serbia**
Talk on, "Temperature distribution in Solar active region and image reconstruction techniques"   *23rd April 2016*

Observational school, SVAP 2016   **Prokuplje, Serbia**
4 day education course on "AS Vidojevica" and usage of 60cm RC telescope   *1st-4thApril 2016*
Photometry and data reduction

Dom Omladine Beograda   **Belgrade, Serbia**
Astronomy school for high school student   *May, 2014 - May, 2015*
- o Lecturer and part of organization team

Summer schools
Participant
- o **Summer school of Astronomy and Astrophysics** - Petnica Science Center, Valjeo (24. July - 2. August, 2015.)
- o **Scientific computer seminar** - Petnica Science Center, Valjevo (May 2013)

Computer skills

Proficient in: Python (scientific modules) and IDL, Linux, bash shell scripting

Intermidiate knowledge of: Ansible, cloud-init, nginx/apache2, postgresql

Scientific Software: IRAF/PyRaf, MaximDL, Origin/QtiPlot, SAODS9, LaTeX

Research interest

- o Dynamics of Solar atmosphere
- o Spectropolarimetric inversion
- o Image reconstruction
- o Instrumentation

Languages

- o **Serbian**: Native speaker
- o **English**: Fluent

Interests

- Musical instruments and music
- Graphic novels/comic books
- Cooking
- Mountaineering

Last update, August 13, 2019