



# Lazar Živadinović | Curriculum Vitae

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## Personal info

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Date of birth: 20.12.1994.

Github: lzivadinovic

Drivers license: A1, B

## Education

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**University of Belgrade, Faculty of Mathematics, Department of Astronomy**

**Belgrade, Serbia**

*Major in Astronomy and Astrophysics*

*2013 – present*

Undergraduate

**Gymnasium "General gymnasium - Kruševac"**

**Kruševac, Serbia**

*Natural Science class*

*2009 – 2013*

## Publications and Conference Proceedings

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**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 12<sup>th</sup> Petnica's annual conference; Petničke sveske; Petnica Science Center, Serbia; 2013;

## Work and Research Experience

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**ITEkako D.O.O.**

**Belgrade, Serbia**

*DevOps Engineer*

*May 2017. - present*

- Work with CI/CD tools
- Work with configuration management tools
- SRE
- Server and network maintenance
- Cloud providers

**Max Planck Institute For Solar System Research**

**Göttingen, Germany**

*Research Internship at SLAM group*

*4<sup>th</sup> July - 5<sup>th</sup> 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*

*2015-Present*

- Junior 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...)
  - 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
  - DSLR photometry on Delta Scutti variable stars
  - Reduction pipeline for variable stars DSLR photometry
  - Maintenance of personal computation server

## Petnica Science Center

Valjevo, Serbia

Participant and presenter at annual conference "Step into science"

2012-2013

- 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

### Spectroscopic data analysis with iSpec

Wroclaw, Serbia

Participant, spectral data reduction and analysis with iSpec

26<sup>th</sup>-29<sup>th</sup> June 2018

### 10<sup>th</sup> Student astronomical workshop (SAR)

Novi Sad, Serbia

Talk on, "Poynting flux derived from photospheric motions"

18<sup>th</sup> November 2017

### Advanced data mining with the Sloan Digital Sky Survey

Belgrade, Serbia

Workshop on databases structures and their usage in astronomy

9<sup>th</sup>- 11<sup>th</sup> July 2017

### Observational school, SVAP 2017

Prokuplje, Serbia

3 day education course on "AS Vidojevica" and remote observation with 60cm RC telescope

1<sup>st</sup>-6<sup>th</sup> June 2017

Remote observation, photometry and data reduction

### 9<sup>th</sup> Student astronomical workshop (SAR)

Belgrade, Serbia

Talk on, "Temperature distribution in Solar active region and image reconstruction techniques"

23<sup>rd</sup> April 2016

### Observational school, SVAP 2016

Prokuplje, Serbia

4 day education course on "AS Vidojevica" and usage of 60cm RC telescope

1<sup>st</sup>-4<sup>th</sup> April 2016

Photometry and data reduction

### Dom Omladine Beograda

Belgrade, Serbia

Astronomy school for high school student

May, 2014 - May, 2015

- Lecturer and part of organization team

### Summer schools

Participant

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

## Computer skills

**General purpose programming:** Python<sup>1</sup>, IDL<sup>2</sup>

**System administraton:** Linux, BASH, LDAP, OpenVPN, Ansible, Nginx/Apache, Postgresql/MySQL

**Scientific Software:** IRAF/PyRAF, MaximDL, Origin/QtIPLOT, SAOVS9, L<sup>A</sup>T<sub>E</sub>X

## Research interest

- Dynamics of Solar atmosphere
- Spectropolarimetric inversion
- Image reconstruction
- Instrumentation
- Automatisatation - data reduction pipelines

<sup>1</sup>Numpy, scipy, matplotlib, astropy, sunpy, flask

<sup>2</sup>Coyote, Solarsoft

## Languages

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

## Interests

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

Last update, February 21, 2019