

CONTACT

✉ Michal.Steiner@unige.ch

🐙 Github

🐦 Twitter



LANGUAGES

Czech	Native
English	10+ yrs
German (unused for long time)	8+ yrs
Japanese	3 yrs

SKILLS

Python	4+ yrs
MATLAB	1 yr
IDL	1/2 yr
Pascal	1/2 yrs

MICHAL STEINER

Assistant / Research Teaching Assistant (PhD candidate)
2nd year
Astrophysics; Exoplanets; Exoplanetary atmospheres

EDUCATION

Ph. D. - Astrophysics; Exoplanetology; Atmospheres of exoplanets
University of Geneva - Geneva, Switzerland

2021 - ongoing

Current Status: 2nd year Ph.D. candidate
Focus on transmission spectroscopy of exoplanetary atmospheres using high-resolution spectrographs

Master program - Astrophysics; Exoplanetology
University of Geneva - Geneva, Switzerland

2019 - 2021

Master program in astrophysics
Specialization in exoplanetology
Master thesis on the topic of transmission spectroscopy of exo-atmosphere of hot Jupiter KELT-10b

Bachelor program - General Physics
Charles University - Prague, Czech republic

2015 - 2019

Bachelor program in General Physics
Bachelor thesis on the topic of radial velocity measurement

PUBLICATIONS

WORKSHOPS & CONFERENCES

EPSC 2022
Granada (Spain)

Sep 2022

Talk (7min):
KELT-10b through high-resolution spectroscopy

Astrostatistics summer school
Geneva (Switzerland)

Sep 2022

EAS 2022
Valencia (Spain)

Jun 2022

Poster:
KELT-10b through high-resolution spectroscopy

General Assembly of PlanetS
Grindelwald (Switzerland)

Apr 2022

Talk (15min) - splinter session domain 3
KELT-10b through high-resolution spectroscopy

Talk (15min)
Eyes on KELT-10b

PROJECTS

High-resolution spectroscopy of planetary atmosphere (Master thesis)

2021

Tool: Python (pipeline created by myself)

Conduct transmission spectroscopy on two transit night HARPS dataset. Main focus has been search for sodium and balmer lines. This work will lead to my first publication (above)

Supervisor:

- Prof. D. Ehrenreich; David.Ehrenreich@unige.ch

Co-supervisors:

- Prof. V. Bourrier; Vincent.Bourrier@unige.ch
- Prof. C. Lovis; Christophe.Lovis@unige.ch
- Dr. J. V. Seidel; JuliaVictoria.Seidel@eso.org

Astrophysics lab project II: Introduction to the physics of low-mass stars and study of the impact of the helium enrichment

2020

Tool: Python (pipeline created by myself)

Analyze grid of stellar model with enriched helium abundances

Supervisor:

- T. Dumont; Thibaut.Dumont@unige.ch

Astrophysics lab project I: Study of WASP-166b, hunting for metals in the atmosphere via transmission spectroscopy and CCFs

2020

Tool: Python (pipeline created by myself)

Conduct transmission spectroscopy on HARPS dataset. Main focus has been search for sodium and iron, both through resolved line detection and CCFs.

Supervisor:

- Dr. J. V. Seidel; JuliaVictoria.Seidel@eso.org

A new study of the long-term and orbital variations of the Be star V923 Aql (Bachelor's thesis)

2019

Tool: Fortran code (externally provided)

Analyze spectroscopic dataset to measure radial velocities in search for long-term and orbital variation

Supervisor:

- prof. RNDr. Petr Harmanec, DrSc.; petr.harmanec@mff.cuni.cz

A contribution to finishing the study of a massive quadruple system V649 Cas

2018

Tool: Fortran code (externally provided)

Studentship: Measure radial velocities from spectra in quadruple system.

Studentship: Applications of Fourier transform using IDL

EXTRACURRICULAR

- Observations with the EULER 1.2 m telescope
 - February 2022 (4 nights)
 - October 2021 (6 nights)
 - July 2021 (7 nights)
- Public outreach
 - Public visits:
 - March 2022 - High school visit
 - Others:
 - May 2022 - Fantasy Basel 2022 - PlanetS booth