

# Curriculum Vitae

## Dr. Irina Smirnova-Pinchukova



### Data Scientist

Data-driven researcher in the field of astronomy with H-Index of 9 and eight years of experience in data processing, analysis, and visualization. Seeking opportunities outside academia.

✉ [irina.smirnova.pinchukova@gmail.com](mailto:irina.smirnova.pinchukova@gmail.com)

🌐 [spirina.gitlab.io](https://spirina.gitlab.io)

in [linkedin.com/in/sp-irina](https://linkedin.com/in/sp-irina)

## Career Record

### Researcher @ Max Planck Institute for Astronomy

Jul 2017 – Dec 2023, Heidelberg

Worked in international collaboration on preparing and releasing a detailed survey of 40 nearby galaxies with active supermassive black holes.

- Led two projects resulting in first-author papers in peer-reviewed journals.
- Involved in other papers resulting in 10 more co-authorships.
- Wrote a successful observational proposal.
- Developed data processing pipelines using Python (numpy, pandas, astropy, scipy, sklearn, matplotlib).
- Consulted other researchers (collaborators and external).
- Presented research results with data visualizations internally and at international scientific conferences.
- The project I led was featured on [nasa.gov](https://nasa.gov).
- Awarded the [Ernst Patzer Prize](#).
- Defended a Dr. rer. nat. thesis @ Heidelberg University in July 2022 with a Magna cum Lauda grade.

## Education

### Master in Astronomy @ Lomonosov Moscow State University

Sep 2015 – Jul 2017, Moscow, Russia

Conducted astronomical data reduction using IDL and Python. Gave talks at international scientific conferences. Won a DAAD grant to participate in a one-month internship @ AIP, Potsdam, Germany. Defended a Master's thesis with Honors based on an average grade of 5,0/5.

Heinrich-Fuchs-Str. 24  
69126 Heidelberg

☎ +49 176 36510333

## Skills

Python	●●●●○
Data handling numpy, astropy, pandas	●●●●●
Optimization curve fitting, mcmc	●●●●●
Data visualization matplotlib, plotly	●●●●●
Machine learning sklearn	●●●●○
Jupyter	●●●●●
Linux/Unix	●●●●○
Windows	●●●●○
Git/GitLab	●●●○
SQL	●○○○○

## Languages

English	●●●●● fluent
German	●●●○ B1-B2
Russian	●●●●● native

## Academic Trips

### Christchurch, New Zealand

astronomical observations

### La Silla, Chile

astronomical observations

### Bamberg, Germany

conference, talk contribution

### Stuttgart, Germany

workshop

### Beijing, China

conference, poster contribution

### Asiago, Italy

summer school, talk contribution

### Calar Alto, Spain

astronomical observations

### Lyon, France

conference, poster contribution

### Bologna, Italy

conference, talk contribution

### Stuttgart, Germany

conference, talk contribution

### Tenerife, Spain

workshop, talk contribution

## Bachelor in Physics @ Lomonosov Moscow State University

Sep 2011 – Jul 2015, Moscow, Russia

Conducted interdisciplinary research in experiments with superconducting tunnel junction detectors. Defended a Bachelor's thesis with Honors based on an average grade of 4,9/5.

## High School - Secondary General Educational School № 65

Sep 2005 – Jul 2011, Ryazan, Russia

Majored in physics and math. Received awards in physics Olympiads. Earned an excellence certificate and a silver medal "For outstanding achievements in studies."

## Personal Interests and Activities

### Leadership and Organizational Roles

Served as a student representative at High School and during the bachelor's studies. Organized PhD Hat Building events, gathering the busiest doctoral researchers to create humorous crafts.

### Volunteer Teacher @ Summer School for Ecology in Russia

Taught mathematics and physics, along with crochet, at an interdisciplinary summer school for highly motivated school students.

### Hobbies

Crochet toys. Crafts. BuJo.

## References

### Prof. Dr. Hans-Walter Rix

MPIA Director

[rix@mpia.de](mailto:rix@mpia.de)

Role: managing director

### Dr. Bernd Husemann

Scientist at EUMETSAT

[bernd.husemann@eumetsat.int](mailto:bernd.husemann@eumetsat.int)

Role: day-to-day supervisor

Heidelberg, 18.08.2023

*Irina Smirnova-Pinchukova* 