

Bern, January 30, 2023

The **Space Weather group of the Astronomical Institute, University of Bern** is inviting applications for a

## **Postdoc (80-100%)**

to work on

### **machine learning and solar/stellar data analysis**

The University of Bern hosts many domains of astronomy, from solar physics, to exoplanets, and satellite observations. The successful candidate will work in the space weather group, which focuses on understanding solar and stellar flares with machine learning. The project has the goal of developing, implementing, and using methods to analyze large astronomical data sets to better understand the physics of flares.

We are looking for highly motivated candidates with previous experience in machine learning and solar or stellar data analysis. The project focuses on the research questions "*When and where will a flare occur? What are the origins and mechanisms of solar flares and stellar superflares?*" and the candidate is expected to autonomously develop ideas and methods to investigate these questions statistically. Support for conferences and collaborations is available.

- Requirements:**
- PhD degree in physics, astronomy, or a similar discipline with a maximum of 3 years postdoc experience after the PhD.
  - Experience in programming with Python and IDL, further programming languages are considered an asset. Experience with machine learning (e.g. PyTorch).
  - Knowledge of ground- and space-based solar or stellar observations.
  - Teamplayer who likes to work with other group members and students.

**Appointment:** as soon as possible after the deadline, open until filled. 2-year position with an option for prolongation.

**Application:** deadline: **March 5, 2023** via email to L. Kleint, containing (as one pdf file): CV, a list of publications, motivation letter, max. 2-page research statement, code samples, names of 3 references that can be contacted.

**Salary:** Based on the regulations of the University of Bern, starting at 87 kCHF/year

**Contact:** Prof. Dr. Lucia Kleint (email [lucia.kleint@unibe.ch](mailto:lucia.kleint@unibe.ch)).

An equal opportunity environment is important to us, and we welcome applicants from groups that are traditionally underrepresented in physics and astronomy. We will be particularly pleased to receive applications from women for the advertised position.