

**Project Title: Advanced atomic data and modeling for X-ray spectroscopy**

**Project description:**

We aim to improve our knowledge of atomic transitions and models for cosmic X-ray sources to the level required by future X-ray instruments: XRISM (expected launch 2022) and Athena (2031). The advanced atomic calculations and modeling are essential for fully exploiting the data obtained with these instruments. The new improvements will be implemented in the SRON code SPEX, and will be applied to the high resolution X-ray spectra of current and future X-ray instruments.

**Supervisors: prof. dr. Jelle Kaastra, dr. Liyi Gu**

**Selection criteria:** masters degree in astrophysics or atomic physics; interests in spectroscopy

**Applications:**

To apply for this vacancy, please send an email to [j.kaastra@sron.nl](mailto:j.kaastra@sron.nl). Please ensure that you upload the following additional documents quoting the project title:

- Curriculum vitae;
- Bachelor's and master's transcripts;
- (Draft of) MSc thesis.

**Deadline: June 1<sup>st</sup> 2021**