Nuclei: From fundamental interactions to structure and stars







The Collaborative Research Centre (SFB 1245) at TU Darmstadt is announcing

Doctoral Positions in Experimental and Theoretical Nuclear Structure and Nuclear Astrophysics

Goal of SFB 1245

Systematic understanding of nuclei across the nuclear chart:

effective field theories of the strong interaction will be tested with key experiments at the Darmstadt accelerator S-DALINAC and other internationally leading facilities.

Research topics

- effective field theories and many-body methods across the nuclear chart
- supernova explosions, neutron stars and mergers, nucleosynthesis
- precision experiments with electromagnetic probes
- laser spectroscopy of short-lived isotopes and helium-like ions
- neutron-rich nuclei, halos and few-neutron correlations

Open positions

We are continuously looking for excellent young researchers who have earned or will earn their Masters degree and want to work in this attractive environment. The doctoral research is embedded in an integrated graduate program with a range of opportunities.

Applicants are invited to submit: curriculum vitae, copies of transcripts and certificates, two recommendation letters, and a letter of motivation to sfb1245@ikp.tu-darmstadt.de. First deadline is March 31, 2024, but applications are always welcome.

