

Job ID: SMI093PD121

The Stefan Meyer Institute for Subatomic Physics (SMI), of the Austrian Academy of Sciences (OeAW), Austria's leading non-university research and science institution, is offering a new

## POSTDOC POSITION (F\*M)

### *in atomic beam experiments for tests of the Standard Model*

(full-time, 40h per week)

for a 1-2-year period.

A Postdoc position is available from September 2021 on atomic beam experiments with hydrogen and deuterium beams within the [ASACUSA](#) and [GRASIAN](#) experiments. The candidate is expected to spend a roughly equal amount of time in Vienna and at CERN, where some of the experiments are located. Atomic beams are used for hyperfine spectroscopy of ground-state atoms, de-excitation studies of Rydberg atoms relevant for the antihydrogen program of ASACUSA, and studies of quantum reflection of hydrogen from surfaces with the aim of creating ultra-cold hydrogen atoms for precision experiments.

#### Your Tasks:

- You will participate in running atomic beam experiments at CERN and build up and execute new experiments at SMI, together with a group of graduate students and senior colleagues currently involved in the experiments.

#### Your Profile:

- Ph.D. in experimental physics (preferably subatomic physics or a related field).
- Familiar with some of the following techniques: microwave resonators, UHV and cryogenic techniques, lasers to detect ground-state atoms and to produce and de-excite Rydberg atoms, detectors for charged particles like MCPs. Experience with both solid state and dye lasers would be an advantage.
- Software skills are an asset, for instance for experiment control (LabView), simulation (Comsol or CST, Geant4) and data analysis (root, Python, C++).

#### Our Offer:

- The SMI is situated near the city centre of Vienna and offers an excellent working environment.
- An open team culture welcomes the applicant.
- An annual gross salary of € 49.718,30 based of the salary scheme of the Austrian Academy of Sciences

Please submit a motivation letter, copies of CV, Ph.D. certificate, publication list and the names of two persons that can be contacted for reference letters to [smi@oeaw.ac.at](mailto:smi@oeaw.ac.at) (mentioning Job ID: SMI093PD121) **no later than September 30, 2021**. More information can be obtained from SMI Jobs or by email: [eberhard.widmann@oeaw.ac.at](mailto:eberhard.widmann@oeaw.ac.at)

*The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. The OeAW lays special emphasis on increasing the number of women in senior and in academic positions. Given equal qualifications, preference will be given to female applicants.*