

The Max Planck Institute for Physics is a research institute focusing on particle and astroparticle physics from both an experimental and a theoretical perspective.

We invite applications for a

## **postdoctoral position (f/m/d)** for the CRESST experiment.

CRESST is a dark matter search based on scintillating cryogenic calorimeters, located at the Gran Sasso underground laboratory in central Italy. CRESST is a worldwide leading experiment in the search of light dark matter candidates. The CRESST group at MPP has a many year's leadership in the development and operation of the low-threshold high-performance detectors that are needed to reach the experimental sensitivity. The responsibility of the CRESST group at MPP comprises all essential aspects of the experiment, with special emphasis on development and fabrication of detectors, cryogenics, DAQ and data analysis.

The successful candidate is expected to take a major role in the analysis of data of the presently ongoing phase. This task includes the complete analysis chain from event triggering via data processing and selection to the statistical inference of dark matter results. Moreover, he/she is expected to contribute to the developments of the data analysis framework, focused to improve its ability to trigger and precisely reconstruct events with tiny energy deposits, therewith maximizing the sensitivity of CRESST for very light dark matter particles.

The candidate should have good communication skills and enjoy working as part of a team as well as independently. He/she is also expected to contribute to the on-site support at LNGS and to the planned upgrade of the CRESST experiment.

Candidates must hold or be near completion of a PhD in experimental physics at the time of recruitment with a background in astroparticle-, particle- or nuclear physics. Expertise in data analysis, statistics and modern programming languages is required, ideally in the frame of C++ and Root. Experience with cryogenic detectors and dilution refrigerators as well as in low background methods is an advantage.

The position is limited to a period of initially two years, with a possible extension to up to four years. Salary and benefits are in accordance with the German public service pay scale (TVöD). The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

For further information, please contact Dr. Federica Petricca (<u>petricca@mpp.mpg.de</u>). The application deadline is March 15, 2020. Later applications will only be considered until the position is filled. Interested applicants should send their application (including a CV, list of publications and a statement of research interest) and arrange for three recommendation letters to be sent either electronically to Diana Werner (<u>dwerner@mpp.mpg.de</u>) or via mail to:

Max-Planck-Institut für Physik (Werner-Heisenberg-Institut) Diana Werner Föhringer Ring 6 D-80805 München Germany

The Max Planck Institute for Physics collects and stores personal data that you send for your application. Further information on the data collected can be found at <u>https://www.mpp.mpg.de/en/studying-</u> and-working/jobs/data-protection-statement-for-job-applications/

