

The Max-Planck-Institute for Physics (MPP) is a research institute focusing on particle and astroparticle physics from both an experimental and a theoretical perspective. Within the framework of the Lise Meitner Group "In search of a new, light physics" we invite applications for a

Postdoctoral position (f/m/d)

within the <u>RADES/babyIAXO Dark Matter axion search</u>. The RADES collaboration is running a axion haloscope at MPP: It aims to convert Dark Matter axions into radiofrequency photons in a resonant cavity in a strong magnetic field.

The experiment employs a 12 Tesla magnet and a dilution fridge reaching a base temperature of better than 7 milli-Kelvin. The experiment enjoys funding from several European grants (such as <u>the ERC-SYG Dark</u> <u>Quantum</u> and the <u>QUANTERA QRADES project</u>) for the development of quantum sensing methods in axion Dark matter searches, and collaborates internationally with a team of around 30 participants. The collaboration also aims at installing a haloscope at the future babyIAXO magnet at DESY, Hamburg, Germany.

The successful candidate is expected to take a major role in running the experimental axion searches in the cryostat at Max-Planck-Institute for Physics in close collaboration with our international team. In addition, the candidate should take a role in contributing to analysis of data and further development of demonstrators in the RADES group and assist in the supervision of students.

Candidates must hold or be near completion of a PhD in experimental physics or equivalent at the time of recruitment. Prerequisites for working in our group are solid laboratory and programming skills. We invite applications from scientists with one or more expertise in the following areas: A person with experience in physics at ultracold temperatures, operation of physics experiments in (dilution-)cryostats, or quantum-limited detection methods would be ideal. Expertise with radio-frequency electronics, mechanics in strong magnetic fields or at cryogenic temperatures, as well as data-analysis in HEP is an advantage.

Assignment of postdoctoral candidates to project tasks will depend on their research interests and area of previous research record.

The position is initially limited to a period of two years, with the possibility of extension. Salary and benefits are in accordance with the German public service pay scale (TVöD Bund).

The Max Planck Society strives for gender equality and diversity. 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 questions concerning the position offered, please contact Babette Döbrich (<u>babette@mpp.mpg.de</u>).

Interested scientists should send their applications (including a CV and a statement of research interests) until **January 20th, 2025** exclusively via our online <u>application portal</u>. Please provide two names and contact details of persons who will be providing reference letters upon our request. We are looking forward to your application.

Max Planck Institute for Physics

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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 https://www.mpp.mpg.de/en/studying-and-working/jobs/data-protection-statement-for-job-applications/