

## PhD Fellowships in Experimental Nuclear and Hadron Physics

The Collaborative Research Center (CRC) "Hadrons and Nuclei as Discovery Tools" (www.sfb1660.de) at Johannes Gutenberg University Mainz (JGU) invites applications for fully funded PhD positions in experimental nuclear and hadron physics. This interdisciplinary center is dedicated to advancing our understanding of the strong interaction, probing the limits of the Standard Model, and pioneering high-precision experiments and modern theoretical approaches.

## Why Join Us?

- State-of-the-art Facilities: Conduct research at cutting-edge facilities, including the MESA accelerator, MAMI, BESIII, and PSI, with access to advanced experimental setups and methodologies.
- Integrated Graduate School: As part of an integrated research training group, you will benefit from a structured training program designed to shape the next generation of scientific leaders. Key features include:
  - Special graduate lectures tailored to your research.
  - A graduate club fostering collaboration and discussion.
  - Annual graduate schools and retreats to broaden your knowledge.
  - Short-term recruitment stipends and travel grants to support your research activities and networking opportunities.
- Professional Development: Access career mentoring, workshops, and opportunities to lead projects while developing essential experimental skills. You will also participate in CRC-wide activities, such as seminars, summer schools, and workshops.
- **International Collaboration**: Engage with a global network of researchers through collaborative projects, research visits, and conferences.
- Work-Life Balance: JGU is committed to creating a family-friendly and flexible work environment, offering dual-career support and a strong emphasis on work-life integration.

About the Program Successful candidates will join a collaborative and dynamic environment at JGU, participating in groundbreaking research across the fields of experimental particle, hadron, nuclear, and atomic physics. PhD students will be

embedded in a vibrant scientific community and contribute to projects that push the boundaries of precision measurements and theoretical modelling.

## Eligibility

- Applicants should demonstrate outstanding performance in their studies and hold (or expect to obtain) a Master's degree in one of the following fields:
  - Experimental Particle, Hadron, and Nuclear Physics
- Strong motivation and a passion for experimental research involving hardware development as well as data analysis, are essential.

## How to Apply Candidates are asked to:

- 1. Name two projects of interest. Information on projects can be found here
- 2. Submit the following documents in a single PDF file:
  - Detailed CV.
  - Cover letter, including a motivation statement.
  - Copies of university degrees and transcripts (in English or German).
  - Proof of English language proficiency (B2 level or higher, if applicable).
- 3. Arrange for **two signed letters of recommendation** to be emailed directly by referees. Referees should also complete the recommendation form

Applications should be submitted via the online form available <u>here</u> by February 28<sup>th</sup>, 2025. Interviews are expected to take place during the week of March 17th, 2025.

Join us in shaping the future of experimental nuclear and hadron physics. Be part of a team that strives for excellence, fosters innovation, and advances global understanding of the universe's fundamental forces.