

Job Title: Junior Research Fellow (JRF)

Reports to: Dr. Susmita Saha

Location: Ashoka University, Sonipat Campus

Experience (in years): Freshers or 0-1 Years

Nature of work: Full Time About Ashoka University:

Ashoka University -India's premier interdisciplinary teaching and research university. An institution that has become a beacon of academic excellence in less than 10 years since its inception. At Ashoka, we encourage you to embrace the new, push the boundaries for continuous learning, and adapt to a world of constant change Because we believe that each Ashokan is capable of becoming a thought leader.

As part of our thriving and committed workforce, you will:

Be Mission-Driven: Champion interdisciplinary learning, innovative pedagogy, and academic rigor to transform Indian higher education.

Think Strategically: Collaborate with visionary minds to shape the future of higher education through strategic planning and a forward-thinking approach.

Act Authentically: Embrace authenticity and integrity, fostering an inclusive and supportive environment where every voice is valued.

Take Accountability: Own your work and drive positive change, as an empowering individual seeking to make a meaningful contribution.

Build Collaboration: Experience the power of teamwork and diverse perspectives, working collectively towards our shared goals.

Deliver Excellence: Strive for excellence in all aspects, upholding the highest standards of academic excellence, student support, and professional development opportunities.

At Ashoka University, we are on a mission to redefine higher education and create a remarkable space where innovation and collaboration thrive. As a **pioneering force in interdisciplinary learning**, we **continually grow and adapt** to stay at the forefront of educational excellence with emphasis on inclusivity and equal opportunity. Our philosophy revolves around **care**, **well-being**, **and connection**, which are deeply embedded in everything we do.

When you join our community, you become part of an extraordinary journey in which you can unleash your potential and make a meaningful impact. Where education empowers, where innovation thrives, and where excellence and humility coexist. We truly believe the world will enrich itself when there is progress with purpose.

About (Department of Physics):

The department of physics (https://www.ashoka.edu.in/department/department-of-physics/) started in 2017 and has been growing in size and scope to encompass a number of contemporary research areas. Our key focus research areas currently are Condensed Matter Physics (Soft and Hard), Biophysics, Astrophysics, Cosmology and Quantum Field theory. Please refer to the faculty profile pages for more information on the research interests of our faculty members. Our PhD program in physics was initiated recently. We aim to select motivated and committed students with a passion for research and to train them to be active and independent researchers.

Our undergraduate physics program provides a solid grounding in the traditional core undergraduate physics curriculum and also an opportunity for students to pursue more eclectic interests in the sciences or beyond. Besides pursuing higher studies in physics, students get the necessary training and skills which can be used in other scientific fields and interdisciplinary endeavors.

The details of courses (graduate and undergraduate) taught at the physics department can be found here.

Role and Responsibilities:

The precession of magnetization could be observed in the form of spin waves. The wavelengths of spin waves are orders of magnitude shorter than those of light waves operating at the same frequency range, which makes magnonic crystals suitable candidates for nanoscale on chip microwave signal processing. *We are looking for a JRF to work on 'Spinwave Non-reciprocity in Kagome Artificial Spin Ice'*. *The Position is open in Dr. Susmita Saha's lab (Magnetic characterization lab), in the Department of Physics, at Ashoka University, India. The project will be funded by SERB File no. SRG/2022/000191.* Training and mentorship specific to the project will be provided. This work will be done in collaboration with Prof. Pintu Das from IIT Delhi.

Duration:

Initial appointment will be for 6 months, which is extendable up to 1 years upon satisfactory performance.

Funding/Remuneration will be provided according to SERB & Ashoka University norms.

Education Qualification:

M.Sc/M.Tech degree in Physics or Nanoscience and Nanotechnology or Electronics or Engineering or other relevant subject (NET/GATE/JEST will get preferences).

Competencies & Skill Sets

- In-depth knowledge and laboratory expertise in Physics lab is required.
- Basic knowledge of some programming language is also required.
- Must have an enthusiasm for research, passion to learn and be able to maintain meticulous records of experimental procedures with a good team spirit.

Last Date for Application:

10th Oct 2023

Application Submission Process

Interested applicant should sent their CV detailing relevant laboratory research experience, contact details of at least three referees (email and contact number) and a cover letter to Susmita Saha (<u>Susmita.saha@ashoka.edu.in</u>) with the subject line – <Job Name _Applicant Name>.

Only shortlisted candidates will be contacted. Candidates applying after the due date will not be considered.

We look forward to receiving your application as we embark together on a remarkable journey of professional growth and development. Join our exceptional community at Ashoka University, where excellence is nurtured, and aspirations are transformed into reality.