

**Job Opportunity (Designated associate/assistant professor) in
the Kobayashi-Maskawa Institute for the Origin of Particles and the Universe
(KMI) of Nagoya University**

The Kobayashi-Maskawa Institute for the Origin of Particles and the Universe (KMI) of Nagoya University, located in Aichi prefecture in Japan, is an international research hub for particle physics and astrophysics. KMI has recently launched the international research unit for innovative dark matter searches jointly with Institute for Space-Earth Environmental Research (ISEE), Nagoya University. The research unit invites applications for a designated associate professor (non-tenure track) or a designated assistant professor (non-tenure track) position for the XENONnT and DARWIN experiments. The unit, led by Prof. Yoshitaka Itow, Prof. Junji Hisano, and Prof. Shingo Kazama, is engaged in direct dark matter searches and related neutrino physics using a state-of-art liquid xenon detector

The XENON is a liquid xenon time projection chamber with a 6-ton active target that will provide unprecedented sensitivity to dark matter. The experiment is located at INFN Gran Sasso National Laboratory (LNGS) in Italy and is currently taking science data. The Nagoya group is responsible for a number of subsystems in the XENONnT experiment, including purification of liquid xenon, neutron veto, and also data-analysis. We are also working on detector R&Ds for the DARWIN project, a future 50t liquid xenon dark matter direct search experiment.

The successful candidate will play a central role, especially in data-analysis for the XENONnT experiment and R&Ds for an ultra-low background "hermetic" liquid xenon time projection chamber (TPC) dedicated for the DARWIN experiment. The development of hermetic TPC will be done in collaboration with a research group from Freiburg University, led by Prof. Marc Schumann.

1. Number of Positions:

- Designated associate professor (non-tenure track) or designated assistant professor (non-tenure track) :1
- The successful candidate will be offered as either rank of position depending on one's experience and career.

2. Qualifications:

- Applicants must have a PhD in experimental (astro-)particle physics or in a related field with relevant experience.
- A background in detector hardware, especially for experience with noble liquid detectors and low-background techniques, is desired.

3. Duration of Appointment:

- The appointment start date is flexible, but will not start sooner than April 1, 2023.

- The appointment is for one year and will be renewed yearly through March 31st 2025.

4. Salary: Compensations will be based on the annual salary system (as stipulated in the *Regulation on Pay Schedule for Employees Receiving Annual Salary at Nagoya University*) and may vary based on the successful candidate's experiences.

5. Application Materials:

- Interested candidates should submit all the following materials via [Academic Jobs Online](#). Application materials must be submitted in either Japanese or English.
 - h. Note that application materials will not be returned.
 - Cover letter
 - Curriculum Vitae
 - Summary of research accomplishments
 - List of all publications and copies of up to three
 - Future research plans
 - Indication of the date available to start
 - Declaration of applicable specific categories
 - Two reference letters
- In November 2021, in accordance with the clarification of the scope of control for “deemed exports” under the Foreign Exchange and Foreign Trade Act (“FEFTA”), some provision of sensitive technology to faculty members and students by universities and research institutions has become subject to control under the FEFTA. Consistently with this change, when applying for faculty positions or to study at the University, faculty, staff, and students will be required to submit a “[Declaration of applicable specific categories](#)” based on the “Flowchart for determining applicable specific categories.” Faculty, staff, and some students will also be required to submit a “Letter of confirmation” at the time of their recruitment or admission.

6. Deadline for application and selection process: All application materials must be received no later than 23:00 November 28th (Mon), 2022 JST. Applicants will be reviewed and contacted about the next stages of the selection process. Later applications may be considered until the end of Jan 2023, if the position remains open.

Nagoya University is committed to increase diversity and to provide equal career opportunities to minorities. Applications by women as well as by all others who would bring additional diversity dimensions are therefore particularly encouraged