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Job opportunity at the Institute for Space-Earth Environmental Research, Nagoya University
(ISEE job opportunity announcement No. 7 FY2025)

1. Job title and number of positions: Designated Assistant Professor (1)
2. Employer: Tokai National Higher Education and Research System (THERS)
3. Affiliation: The Designated Assistant Professor belongs to the Center for International Collaborative Research (CICR) of ISEE. The Designated Assistant Professor will also belong to one of the seven Research Divisions depending on their expertise. The Designated Assistant Professor may also belong to one of the two Offices and other two Centers of ISEE depending on their interests.

4. Research fields

(1) About Institute for Space-Earth Environmental Research (ISEE)

Established as a joint usage/research center that interlinks space science and earth science, the Institute for Space-Earth Environmental Research (ISEE) works toward the mission to clarify the mechanisms and relationships between the Earth, the Sun, and cosmic space, treating them as a seamless system, and to contribute to solving issues related to the global environment and human society spreading in space. To achieve the mission, ISEE promotes researches based on the institute structure consisting of seven research divisions (Division of Integrated Studies, Division of Cosmic-Ray Research, Division of Heliospheric Research, Division of Ionospheric and Magnetospheric Research, Division of Meteorological and Atmospheric Research, Division for Land-Ocean Ecosystem Research, and Division for Chronological Research), three offices (Office for the Development of Interdisciplinary Research Strategy, and Office for the Promotion of Transdisciplinary Network), and two research centers (Center for International Collaborative Research, Center for Integrated Data Science, and Center for Orbital and Suborbital Observations).

(2) Immediately after hire:

The successful candidate is expected to actively work in the project entitled “Sun and stars: Investigation with high-performance computing,” which includes three work packages: WP1: The solar convective conundrum; WP2: Sun in time and the solar-stellar connection; WP3: Space Weather and Exo-space weather. He/she will work on some of the tasks, including code development, simulation runs, and simulation data analysis, and write and publish scientific papers and present the results at scientific conferences. The work will be performed at ISEE and supervised by Designated Professor Sacha Brun and Professor Hideyuki Hotta. The successful

candidate is expected to possess good knowledge in at least one of the following research fields: High-performance computing (Fortran, C/C++, MPI, OpenMP), magnetohydrodynamic (MHD) modeling, data analysis of numerical simulation, and solar/stellar physics. We welcome applicants with experience in magnetohydrodynamic modeling, even if they do not currently specialize in solar stellar physics. Good expertise in developing high-performance numerical code and/or radiation modeling is an advantage. Good command of English is required.

(Scope of changes): Tasks specified by the Tokai National Higher Education and Research System.

(3) Work locations: (Immediately after being hired)

- Chikusa Ward, Nagoya City, Aichi Prefecture (Scope of change) Work location designated by Tokai National Higher Education and Research System
- Several mid-term work visits to the CEA and Observatory of Paris-Saclay France are foreseen.

5. Appointment conditions:

- (1) Designated Assistant Professor
- (2) Salary: Approx. 400,000JPY/month
- (3) Work hours: 38.75 hours/week
- (4) Insurance enrollment: Mutual aid association (short-term), Welfare pension, Employment insurance, Workers compensation insurance
- (5) Work Hours: Based on THERS Employee Work Rules
(https://education.joureikun.jp/thers_ac/act/frame/frame110010928.htm)
- (6) Days off: Saturdays, Sundays, national holidays, and New Year's holidays from December 29th to January 3rd.
- (7) Passive smoking prevention measures: Smoking is prohibited on campus in principle

6. Research area: Any field related to space-earth environment, but mainly solar and stellar physics

7. Number of vacancies: One designated assistant professor

8. Qualifications: Applicants must satisfy all of the following conditions:

- (1) Holds a doctoral degree, or is expected to earn it before the start of the work, in Space Physics, Earth sciences, Physics, or any other field directly related to the project; and
- (2) does not have another primary occupation or is not a graduate student or a researcher at the time of the start of the employment.

9. Starting date: November 1, 2025 or later at the earliest possible time
10. Term of employment: March 31, 2026 (maximum until March 31, 2028)
*The appointment is renewable every fiscal year based on work performance, attitude, and ability, as well as budget availability, etc. The probationary period: six months.
11. Application deadline: 08:00 am on August 15, 2025 (Japan time)
12. Screening process: Document screening and Interview
13. Application materials:
 - (1) Curriculum Vitae
 - (2) Summary of research achievements (within two pages, A4 size)
 - (3) Publication and research activity list and copies of most relevant papers (three papers max.)
 - (4) Research Proposal (within four pages, A4 size)
Please describe how you plan to contribute to the research and development requirements specified in item 4, "Research Fields". Please specify your experience in (Radiative)MHD modeling and analysis.
 - (5) Possible start date
 - (6) Name and contact information of two professional references
 - (7) Applicable Specific Category Determination Form (See section 17)

The application materials will be shared with Designated Professor Allan Sacha Brun for the selection process.

14. Submission:

Applicants are required to make one PDF file (up to 10MB) that includes all documents.
Subject: Application for ISEE job opportunity Postdoctoral researcher FY2025 (ISEE job opportunity announcement No. 7 FY2025)
Address: inst-recruit(at)t.mail.nagoya-u.ac.jp *Please to replace the (at) with @ *You will receive a confirmation of receipt within three business days after sending the application.
If you have not received a confirmation of receipt by then, please contact us at 15. (1)
15. Inquiries:
 - (1) Regarding application documents: Tomohiro Tanabe, Personnel Affairs Section,

General Affairs Division Institute for Space-Earth Environmental Research (ISEE),
Nagoya University F3-3 (250), Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8601,
Japan

e-mail: inst-recruit(at)t.mail.nagoya-u.ac.jp

*Please to replace the (at) with @

(2) Regarding research content:

Professor, Hideyuki Hotta (Division for Integrated Studies, ISEE, Nagoya
University), Institute for Space-Earth Environmental Research (ISEE), Nagoya
University, Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8601, Japan

e-mail: hideyuki.hotta.info.aaa (at) g.thers.ac.jp

*Please to replace the (at) with @

Professor Allan Sacha Brun (CEA and Observatory of Paris-Saclay, France)

e-mail: sachabrun (at) cea.fr

*Please to replace the (at) with @

16. Others:

Personal information provided in relation to the application will be used only for the purpose of screening. Upon completion of the screening, all personal information, except for information of those who passed the screening, will be discarded responsibly. In addition, Institute for Space-Earth Environmental Research is an active promotor of Gender Equality. Browse the web page below for more detail. <https://www.kyodo-sankaku.provost.nagoya-u.ac.jp/en/> The contents herein are originally created in Japanese. If any discrepancies do exist, the original Japanese version shall prevail.

17. Remarks:

In November 2021, with the clarification of the scope of control of "deemed exports" under the Foreign Exchange and Foreign Trade Act ("FEFTA"), a portion of the provision of confidential information must comply with FEFTA. Technology provided by universities and research institutions to faculty and staff is subject to control under FEFTA. As a result of this change, faculty applications will also be subject to FEFTA controls. When applying for this solicitation, you will be required to submit an Applicable Specific Category Determination Form in accordance with the Applicable Specific Category Determination Flowchart. Please download the form below and submit it.

<https://nuss.nagoya-u.ac.jp/s/bLFocRofmoj83zp>

Our university is actively committed to promoting diversity and work-life balance. For more information, please visit the following URLs:

Gender Diversity Center Website: <https://www.kyodo-sankaku.provost.nagoya-u.ac.jp/>

Declaration on the Promotion of Diversity, Equity, Inclusion & Belonging (DEIB):

<https://www.thers.ac.jp/about/declaration/deib/index.html>

If you have experienced periods in the past when your research activities were interrupted or delayed due to reasons such as childbirth, childcare, family care, or illness, you may state this in your curriculum vitae (CV). We assure you that disclosing this information will not result in any unfair evaluation at our university. In addition, faculty members are required to submit a "Confirmation Form" at the time of employment.