

The 5th ISEE Symposium:

Toward the Future of Space–Earth Environmental Research

Date: November 15 to 17 (Tuesday to Thursday), 2022

Venue: Sakata–Hirata Hall, Nagoya University (Higashiyama campus, Nagoya city, Japan)

This symposium is a hybrid conference with both in-person and online attendance options.

Host: Institute for Space–Earth Environmental Research (ISEE), Nagoya University

Web page: <http://www.isee.nagoya-u.ac.jp/symposium05>

We are planning to hold the 5th ISEE symposium – *Toward the Future of Space–Earth Environmental Research* – in autumn 2022, aiming to share space–Earth environmental research's present status and prospects through interdisciplinary discussion from various aspects. The symposium covers topics on space–Earth sciences and new approaches to multidisciplinary collaboration, including the discussion also for the capacity building of young scientists. The symposium consists of the following six topical sessions and a panel discussion on the future challenge of space–Earth environmental research.

Session 1: Climate variations in space–Earth environment: paleoclimate, global warming, and space climate

Keynote Speaker: Go Iwahana (University of Alaska Fairbanks)

Session 2: Prediction and mitigation of disaster in space–Earth environment: typhoon, torrential rain, space weather disaster prevention, and forecasting technology

Keynote Speaker: Mamoru Ishii (NICT)

Session 3: Next-generation observation of space–Earth environmental research: future planning of satellite missions, aircraft, ground observation, and measurement technology

Keynote Speaker: James Crawford (NASA)

Session 4: Next-generation computational science in space–Earth environmental research: advanced simulation, integrated modeling, machine learning, and data science

Keynote Speakers: Hideyuki Hotta (Chiba University), Takeshi Enomoto (Kyoto University)

Session 5: International collaborations for space–Earth environmental research from present to future

Keynote Speaker: Nat Gopalswamy (NASA)

Session 6: Interdisciplinary fusion in space–Earth environmental research: possibilities and challenges of fusion of Earth science, space science, anthropology, and history

Keynote Speakers: Ilya Usoskin (University of Oulu), Seiji Kadowaki (Nagoya University)

Poster Session: (2 hours)

Each session is 2 hours, consisting of invited keynote (30 min), solicited (20 min), and contributed (10 min) presentations. Each session contains a discussion on the future plan of ISEE as well as the capacity building of young scientists (10 min).

Panel Discussion: (about 2 hours) Toward the future of space–Earth environmental research

Theme I: Sessions 1 and 2

Theme II: Sessions 3 and 4

Theme III: Sessions 5 and 6

ISEE Award Ceremony: (1 hour)

Aiming to develop space–Earth environmental research, promote interdisciplinary research, and explore the new discipline of space–Earth environmental research, we are presenting the ISEE Award each year to a prominent research activity that is based on the ISEE Joint Research Program.



Important Dates

20 July 2022: Open the registration and abstract submission site

15 September 2022: Deadline for abstract submission and early-bird registration

15 October 2022: Deadline for registration

Free Registration

Registration and submission of abstract for this symposium are both free.

Scientific Organizing Committee (SOC):

K. Kusano (Chair of SOC, the director of ISEE)

Y. Kasahara (Kanazawa University)

Y. Kokubu (Japan Atomic Energy Agency)

M. Koike (The University of Tokyo)

Y. Miyoshi, T. Hiyama, K. Shiokawa, N. Takahashi, K. Iwai, F. Miyake (ISEE)

Local Organizing Committee (LOC):

H. Aiki (Chair of LOC)

S. Masuda, Y. Otsuka, M. Nose, T. Nagahama, T. Kato, T. Shinoda, M. Minami (ISEE)

Contact: kyodo-isee@isee.nagoya-u.ac.jp

The 5th ISEE Symposium is followed by the ISEE Community Meeting 2022 on Friday, November 18th, to be announced later at <https://www.isee.nagoya-u.ac.jp/co-re/meeting.html>