The Research and Education Innovation Office comprises the six committees shown in Figure 1. It implements activities to deal with various problems related to research and education at NIFS and raise the research and education level. Two crucial activities in the 2023 fiscal year of this office are reported below.

<Fusion Science Seminar and NIFS Colloquium>

The Fusion Science Seminar (FSS) is a scientific seminar with distinguished lecturers in a wide scientific research field. The NIFS Colloquium is an opportunity to learn about topics in which research communities are interested. Three FSSs and four NIFS Colloquiums were held in a hybrid format, and many scientists, students and staff (almost 100 participants on average) participated in them and discussed topics deeply and widely (Fig. 2). The information of these seminars and colloquiums can be seen on the NIFS webpage (https://www.nifs.ac.jp/about/reio/ all/index.html).

FSS-1 "Quantum materials dynamics at the nexus of exascale computing, AI, quantum computing, and X-ray scattering", Aiichiro Nakano (Professor, University of Southern California)



Fig. 1 Composition of the Research and Education Improvement Office and the committees positioned within it.



Fig. 2 Picture at NIFS-Coll-3.

FSS-2 "90 years in Elementary Particles and 21 cen-

tury in Physics", Hikaru Kawai (Professor, National Taiwan University)

- FSS-3 "Solid-state physics and atomic/molecular physics experiments in large facilities", Toshio Hyodo (KEK)
- NIFS-Coll-1 "Logic behind venture capital investment in Western nuclear fusion ventures, and key points for implementing research results in society", Kenichi Hattori (venture capitalist)
- NIFS-Coll-2 "Recapturing the Big Questions: Communicating cutting-edge research to outside the field and weaving the "story of academia", Tetsuya Suzuki (Editor-in-Chief, Kyoto University Press)
- NIFS-Coll-3 "Fusion Energy Innovation Strategy: Expectations for Academic Research", Daisuke Baba (Director for Research and Development Strategy, Research and Development Bureau, Ministry of Education, Culture, Sports, Science and Technology (in charge of nuclear fusion and international nuclear cooperation))
- NIFS-Coll-4 "Data creation and utilization for open science", Kazuyoshi Yoshimi (The Institute for Solid State Physics, The University of Tokyo)

<Diversity of researchers at NIFS >

To Improve research capabilities, increasing the diversity of researchers is an urgent issue at NIFS. The Human Resources Development Committee has addressed this issue and has actively reached out to female researchers and students outside NIFS through the Workshop for Women in Plasma Physics at the 7th Asia-Pacific Conference on Plasma Physics, NIFS collaboration- research programs and other events (Fig. 3). In addition, this committee has made efforts to support young researchers. In the framework of the Young Researcher Start-up Support Program, the committee assigned research grants for two researchers in FY2023.



Fig. 3 Flyer for the open recruitment of female researchers in FY2023.