

Domestic Workshop on Spin Physics

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24th International Symposium on Spin Physics was scheduled to be held in Matsue City in September 2020 as SPIN2020, but it was postponed to October 2021 because of COVID-19 pandemic and will be held as SPIN2021. Prior to SPIN2021, we held a domestic workshop on spin physics as a satellite workshop of SPIN2021 on February 23rd and 24th, 2021 to discuss future themes of spin physics and related fields, activities of various groups, and prospects for development in Japan, as well as to provide a platform for presentations by young researchers. The workshop language was Japanese.

In the workshop, topics related to spin phenomena in particle and nuclear physics and related fields were discussed. In accordance with the topics to be discussed in SPIN2021, the following topics were reviewed:

- proton radius for the nucleon structure
- RHIC and COMPASS results, three-dimensional parton distribution, and QCD spin physics for the spin structure of hadrons
- physics of the Electron-Ion Collider for future facilities and experiments
- theoretical and experimental reviews for fundamental symmetries and physics beyond the standard model
- polarized electron sources and solid polarized targets
- physics at LEPS for spin physics research using photon, lepton, and hadron probes
- low-energy spin physics in nuclear reactions and nuclei
- applications of spin physics

The workshop also included presentations by young researchers on the understanding of the single-spin asymmetry, nucleon structure studies based on the lattice field theory, theory of the electric-dipole moment, spin-spin correlation in K-pp decay, polarized target of COMPASS, study of three-body nucleon force using a polarized target, and structure analysis of materials by neutron scattering. The presentations and discussions will be published and distributed as conference proceedings.

SPIN2021 is planned to be held in October as a hybrid conference combining on-site and online sessions. The domestic workshop was held at the same venue as that for SPIN2021, the Kunibiki Messe Convention Center in Matsue City. Together with the venue staff, we discussed ideas for the success of the hybrid conference and held the domestic workshop as a test run of SPIN2021. Considering the current situation

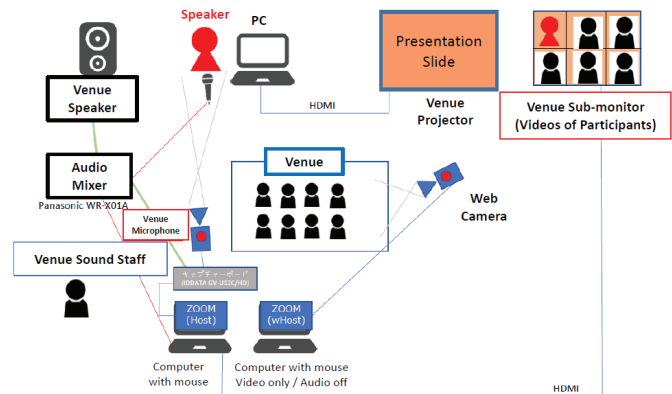


Fig. 1. Setup of the venue for the hybrid conference.

of COVID-19, only the organizing committee participated on-site this time, while the others participated online. The number of on-site participants in the workshop was 7, and the number of online participants was 45.

The on-site portion of the workshop was in the format of a regular research meeting in a conference room, which was distributed via Zoom so that people could participate online. The system shown in Fig. 1 was prepared so that the online participants could participate in the question and answer session in the same way as on-site participants. Some speakers and chairpersons spoke on-site, while others presented online. The speakers at the venue displayed their slides on the projector as in a normal conference, and the operator distributed a split line to Zoom. The online speakers also displayed their slides via Zoom screen sharing.

The workshop was held with financial support from the RIKEN Nishina Center and with great help from the venue staff. The hybrid conference method allowed us to integrate on-site and online discussions and conduct an active workshop. We would like to build on the success of this experience to organize a larger SPIN2021 International Symposium with parallel sessions in addition to the plenary session, welcoming more on-site and online participants from abroad.

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