

Research Report

ICRR Inter-University Research Program 2021

Research Subject:

Kashiwa Dark Matter symposium 2021

Principal Investigator:

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Participating Researchers:

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Summary of Research Result :

The 3rd Kashiwa Dark Matter symposium took place from November 29 to December 2, 2021. Originally, the symposium was planned as a hybrid event. Due to the unclear situation of the COVID-19 pandemic in Japan in early fall and imposed University restrictions, it was decided to conduct it as completely virtual event. The symposium lasted four days, over five hours each day. Compared to 2020 it was slightly longer, including more and longer breaks. No conference fee was charged.

Central access point of the symposium was the webpage <https://2021.kashiwa-darkmatter-symposia.org/> with program and registration. The talks and oral discussions were held on Zoom (in webinar mode), and the coffee breaks and poster

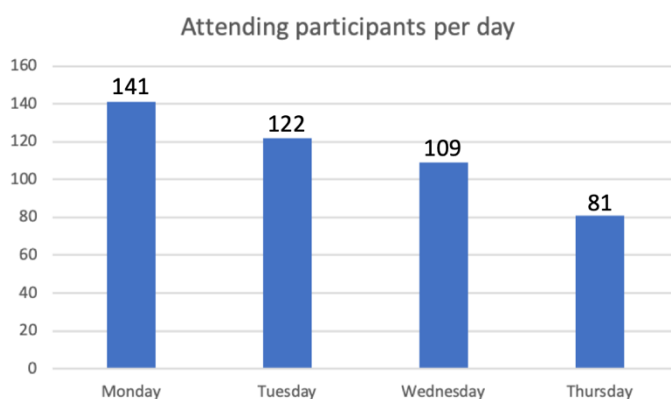


Figure 2: Participation



Figure 1: Group picture

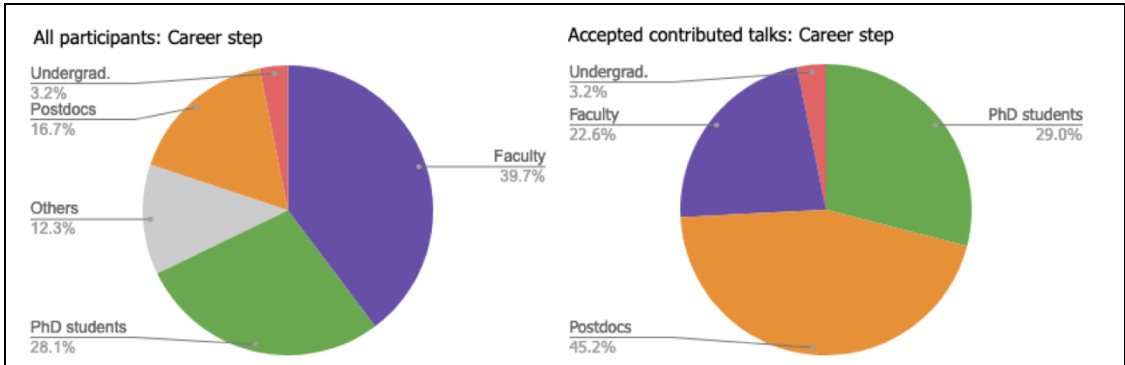


Figure 3: Participants statistic

session using the Gather.Town tool. Additionally, a Slack workspace was available for offline discussions. The oral talks were additionally live streamed worldwide on YouTube. 317 people registered from 28 countries worldwide (Fig. 2). 189 registrants (60%) were affiliated to Japanese institutions. 28% of all registrations were graduate students, 17% Postdocs, and 40% faculty staff (rest “other”). 17% of all registrants were female and 11% of the participants had an unknown gender association. 14 distinguished highlight speakers were invited, and 30 contributed talks of 10 minutes length each were chosen plus 25 poster presentations. As in the last years, the ratio of young students was about 30% (Fig. 3). The daily attendance was about 110 persons, with a slight decline over the days (Fig. 1).

The program included recent updates from the Dark Matter searches in the different fields. Special focus was drawn to search for Primordial Black Holes, with a dedicated session including two highlight talks and four contributed talks. In the Indirect Detection session, besides high-energy gamma-ray searches, attention was drawn on new search strategies at lower photon energies from MeV to radio emission. In the Direct Detection session, both latest noble gas and cryogenic detection efforts were discussed. In the collider session, measurements with the LHC and Belle experiments at KEK were presented. The theory session opened the symposium with a focus on electroweak dark matter.

As in 2020, most presentations have been made available on the symposium series’ YouTube channel, which has already attracted almost 5000 visitors since 2020. Based on 34 responses in the participant feedback, the symposium was rated in average with 4.4 points out of five.

No.