Contribution ID: **936** Contribution code: **MOPM039** Type: **Poster Presentation**

# On-resonance round beam experiment in the HLS-II storage ring

*Monday 8 May 2023 16:30 (2 hours)*

The strong intra beam scattering effect and the increase in horizontal emittance become common issues for next-generation ultra-low emittance storage rings. The round beam can be an effective method to solve these problems. Moreover, the produced round synchrotron radiation is suitable for optical matching. The on-resonance tune is an easier method to achieve round beam. In this paper, simulation and experimental results are introduced based on the nominal lattice of the HLS-II storage ring.

## Funding Agency

Work supported by the National Natural Science Foundation of China
(No. 11975227).

## Footnotes

## I have read and accept the Privacy Policy Statement

Yes

**Primary author:** WANG, Guanliang (University of Science and Technology of China)

**Co-authors:** CHEN, Kemin (University of Science and Technology of China); FENG, Guangyao (University of Science and Technology of China); HOSAKA, Masahito (University of Science and Technology of China); WANG, Zhe (University of Science and Technology of China); XU, Wei (University of Science and Technology of China); YU, Yongbo (University of Science and Technology of China)

**Session Classification:** Monday Poster Session

**Track Classification:** MC2: Photon Sources and Electron Accelerators: MC2.A05: Synchrotron Radiation Facilities