



Contribution ID: 1088 Contribution code: WEPL188

Type: **Poster Presentation**

Studies of coupled-bunch instabilities in the HEPS booster

Wednesday, 10 May 2023 16:30 (2 hours)

The High Energy Photon Source (HEPS), which is a 6 GeV diffraction-limited storage ring (DLSR)-based synchrotron light source, is under construction in Beijing, China. HEPS consists of a Linac, a booster synchrotron, and a storage ring. The HEPS booster is proposed to operate in multi-bunch mode. And the 5-cell PETRA-type cavity, which is rich in high-order modes (HOMs), is chosen to be used in HEPS booster. For the related coupled-bunch instabilities (CBI), comprehensive studies are performed. In this paper, we present the studies of CBIs both at the two fixed energy points (500 MeV and 6 GeV) and with the consideration of the energy ramping process in the HEPS booster.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary authors: XU, Haisheng (Institute of High Energy Physics); LIANG, Pengfei (Institute of High Energy Physics); PENG, Yuemei (Chinese Academy of Sciences); WANG, Na (Chinese Academy of Sciences)

Presenter: XU, Haisheng (Institute of High Energy Physics)

Session Classification: Wednesday Poster Session

Track Classification: MC5: Beam Dynamics and EM Fields: MC5.D05: Coherent and Incoherent Instabilities Theory, Simulations, Code Developments