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## Narrowband impedance studies in the HEPS storage ring

*Thursday, 23 May 2024 16:00 (2 hours)*

The High Energy Photon Source (HEPS) is a fourth-generation synchrotron radiation facility with design beam emittance of less than 60 pm. Impedance modelling is an important subject due to the adopted small beam pipe as well as the tight requirements from beam collective effects. Narrowband impedances can be generated by the discontinuity of the vacuum chamber or the finite conductivity of the beam pipe. The coupled bunch instabilities caused by the narrowband impedances could restrict the beam current or perturb the synchrotron radiations. In this paper, the narrowband impedances in the HEPS storage ring are investigated element by element.

### Footnotes

### Funding Agency

### Paper preparation format

Word

### Region represented

Asia

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