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Impedance measurements of key elements in the HEPS

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Impedance modeling is an important subject in diffraction limited storage rings based light sources, due to the adopted small beam pipe as well as the tight requirements from beam collective effects. Therefore, a batch of impedance bench measurements are performed or planned for the dominant impedance contributors in HEPS, including resistive wall impedance of the NEG coated vacuum chambers, as well as the geometrical impedance of components with large impedance for single element or that show large contributions due to large quantities. In this paper, the impedance measurement of the key elements in the HEPS will be discussed, and the main results are given and compared with the theoretical estimations.

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Footnotes

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Yes

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