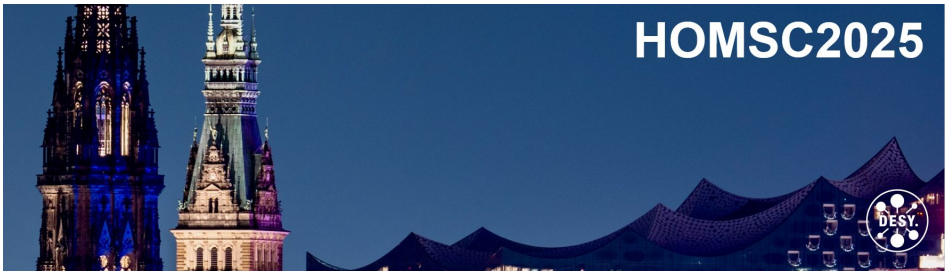

Contribution ID: **30** Type: **Oral contribution**

HOM Damping for EIC Crab Cavities

Tuesday 7 October 2025 15:00 (30 minutes)

The interaction region (IR) crab cavity system is a special RF system to compensate the loss of luminosity due to a 25 mrad crossing angle at the interaction point (IP) for electron ion collider (EIC). There will be six crab cavities, with four 197 MHz crab cavities and two 394 MHz crab cavities, installed on each side of the IP in the proton/ion ring, and one 394 MHz crab cavity on each side of the IP in the electron ring. In this paper, we show recent progress of the HOM impedance threshold calculation, as well as the HOM damping design, for 197 and 394 MHz crab cavities.

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