Contribution ID: **9** Type: **not specified**

HOM Dampers Design for the MAX IV 100 MHz RF Cavities

Thursday, November 9, 2023 10:50 AM (20 minutes)

This presentation describes the electromagnetic, thermal and mechanical design and RF characterization for the prototype HOM dampers for the MAX IV 100 MHz RF cavities. The dampers are of antenna type and aim to reduce the shunt impedance of all modes to below ~3 kOhms while keeping one of the modes basically unaffected in both frequency and quality factor so that it can be effectively dealt with by means of temperature tuning. The analysis shows it is important to consider the effect on the HOM damper efficiency of the characteristics of the transmission that connects the cavity to the high power circulator located between the RF transmitter and the cavity.

Primary author: O. CAIAFA DUARTE, Henrique (MAX IV Laboratory)

Presenter: O. CAIAFA DUARTE, Henrique (MAX IV Laboratory)

Track Classification: 26th ESLS RF Workshop