



Contribution ID: 72

Type: **not specified**

HOM couplers for crab cavities and challenges (10'+8')

Tuesday 4 February 2020 16:18 (18 minutes)

Abstract:

Two types of crab cavities will be installed into the LHC as part of the HL-LHC project. To mitigate the problems of large beam-induced heat-loads and instabilities, the higher order modes in both cavities are damped by coaxial couplers. This presentation will detail the HOM damping mechanisms chosen, specifically looking into broad-band damping and limitations with dynamic heat loads. Finally, design constraints arising from manufacture and transport are presented with key points for discussion.

Provocative topics:

High power SC HOM couplers, gasket heat loads, transport of HOM couplers, manufacture of HOM couplers.

Presenter: MITCHELL, James Alexander (CERN)

Session Classification: Working Group Session