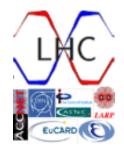
## LHC-CC10, 4th LHC Crab Cavity Workshop



Contribution ID: 37

Type: not specified

## Field quality and non-linearity of deflecting mode 20'

Thursday 16 December 2010 16:00 (20 minutes)

Due to the high beta functions at the location of the local crab cavities, there is a stringent limit on the maximum allowable non-linearities of the deflecting field. Field quality and higher-order harmonics for a conventional elliptical crab cavity and for LHC compact crab cavities are analysed, and their impact on the cavity design is considered. Aspects related to beam loading due to transverse offset and phase jitter are also addressed.

Authors: Dr JENSEN, Erk (CERN); CALAGA, Rama (BNL)Presenters: Dr JENSEN, Erk (CERN); CALAGA, Rama (BNL)Session Classification: Schedule & Future Outlook