FCC Week 2019



Contribution ID: 463

Type: Presentation

Evolution of the canted costheta (CCT) design

Wednesday 26 June 2019 13:50 (20 minutes)

We present the CCT design for an FCC-hh or HE-LHC 16-T main dipole magnet and its evolution from initial designs from Lawrence Berkeley National Laboratory to the conceptual design reports. We also discuss main advantages and disadvantages of this design, together with technical challenges and potential solutions as encountered in the model-magnet design and construction at Paul Scherrer Institute.

Author: AUCHMANN, Bernhard (CERN)

Co-authors: BROUWER, Lucas (Lawrence Berkeley National Laboratory); CASPI, Shlomo (Lawrence Berkeley national laboratory USA); FELDER, Roland (PSI); GAO, Jiani (Paul Scherrer Institut); MONTENERO, Giuseppe (PSI); SANFILIPPO, stephane (Paul Scherrer Institut); SIDOROV, Serguei (PSI)

Presenter: AUCHMANN, Bernhard (CERN)

Session Classification: FCC-hh accelerator (EuroCirCol)

Track Classification: Superconducting magnets & associated technologies