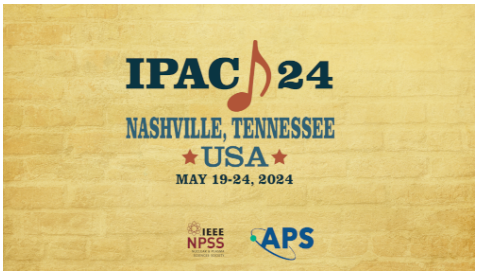

Contribution ID: **1056** Contribution code: **MOPC15** Type: **Poster Presentation**

Study of the corrector systems for the new lattice of the CERN hadron-hadron Future Circular Collider

Monday, 20 May 2024 16:00 (2 hours)

A new layout for the energy-frontier hadron collider (FCC-hh) under study at CERN has been designed, following the constraints imposed by the outcome of recent tunnel placement studies. The new lattice and the need to maximize the dipole filling factor triggered a deep revision of the corrector systems located in the regular arcs, such as orbit, tune, linear coupling, and chromaticity correctors. The system of octupoles aimed at providing Landau damping has also been reviewed. Furthermore, the corrector package in the experimental insertion aimed at compensating the field quality of the triplet quadrupoles has been reconsidered in view of the experience gained with the design of the corresponding system developed for the CERN HL-LHC. In this paper, an account of this review is presented and discussed in detail. These estimates will need confirmation when the magnet design of the various correctors will be studied.

Footnotes

Funding Agency

Paper preparation format

LaTeX

Region represented

Europe

Primary author: PEREZ-SEGURANA, Gustavo (European Organization for Nuclear Research)

Co-authors: TODESCO, Ezio (European Organization for Nuclear Research); GIOVANNOZZI, Massimo (European Organization for Nuclear Research)

Presenter: PEREZ-SEGURANA, Gustavo (European Organization for Nuclear Research)

Session Classification: Monday Poster Session

Track Classification: MC1: Colliders and other Particle and Nuclear and Physics Accelerators: MC1.A01 Hadron Colliders