



Contribution ID: **2096** Contribution code: **MOPL058**

Type: **Poster Presentation**

Simulating Tilted Solenoids

Monday, 8 May 2023 16:30 (2 hours)

The strong field of the experimental solenoid around the interaction point has a considerable effect on the beam optics. Moreover, if the beams traverse the solenoid at an angle, as it is typically the case in a collider, the solenoid will also affect the closed orbit within and beyond the solenoid. Simulating these effects is not trivial. In the following we outline different philosophies of how this can be tackled and discuss how it is done in practice in various accelerator codes.

Funding Agency

WORK SUPPORTED BY THE SWISS ACCELERATOR RESEARCH AND TECHNOLOGY (CHART)

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: VAN RIESEN-HAUPT, Léon (Ecole Polytechnique Fédérale de Lausanne)

Co-authors: BURKHARDT, Helmut (European Organization for Nuclear Research); HOFER, Michael (European Organization for Nuclear Research); TOMAS, Rogelio (European Organization for Nuclear Research); PIELONI, Tatiana (European Organization for Nuclear Research); PERSSON, Tobias (European Organization for Nuclear Research)

Presenter: VAN RIESEN-HAUPT, Léon (Ecole Polytechnique Fédérale de Lausanne)

Session Classification: Monday Poster Session

Track Classification: MC1: Colliders and other Particle Physics Accelerators: MC1.A02: Lepton Circular Colliders