

Contribution ID: 210 Type: not specified

Update on canted cosine theta final focus magnet design

Wednesday, 11 April 2018 16:20 (15 minutes)

The requirements for the Final Focus Quadrupoles of FCC-ee are very stringent in terms of field quality and compactness of the design. We are happy to report that we have a design based on the Canted Cosine Theta concept that fullfills all requirements: Very compact design (distance of magnetic centres of the two quadrupoles at the tip 66mm), excellent field quality (less than 0.1units in all multipoles) high field gradients (150T/m possible), no dipole component, adequate space to fit needed correctors as extra rings on top of the quadrupoles. The magnetic design and misalignment study have been finished.

Primary author: KORATZINOS, m (Massachusetts Inst. of Technology (US))

Presenter: KORATZINOS, m (Massachusetts Inst. of Technology (US))

Session Classification: FCC-ee accelerator

Track Classification: FCC-ee ACC