Update on SuperKEKB Optics

Maël Le Garrec CERN — BE-ABP-LNO

Thanks to the Optics Measurements and Corrections Team at CERN



Plan

Context

 β -beating

LER Amplitude Detuning





Context

- Some analysis were missing at the last FCC meeting
 - https://indico.cern.ch/event/1433104/

- Namely:
 - $^{\circ}$ Comparison of TbT β -beating vs LOCO
 - Model comparison of amplitude detuning



Plan

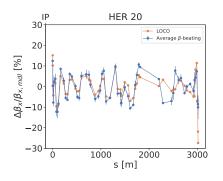


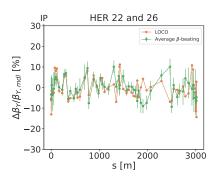
HER Squeezed 8mm LER Squeezed 8mm





HER Squeezed 8mm

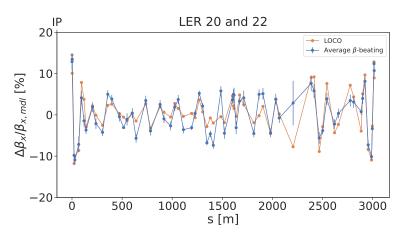




• Good agreement for HER at 8mm



LER Squeezed 8mm



- Good agreement for LER at 8mm
- Beating at IP is similar for TbT and LOCO

Plan

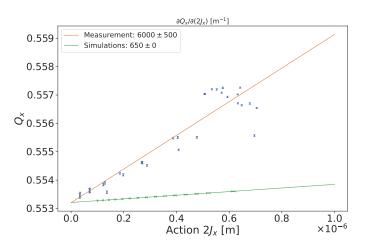
Context

 β -beating

LER Amplitude Detuning



LER Amplitude Detuning



• One order of magnitude larger in real life