EIC IR Design Meeting

Draft Minutes for Friday, April 24, 2020

Agenda

1	Impact on detector of introducing solenoid field—V. Morozov	1
2	All other business	1
3	Draft agenda for Friday, May 1, 2020 from 2:30 to 3:30 p.m.	2
1	Impact on detector of introducing solenoid field—V. Morozov	

Title: "Impact on Detector of Introducing Solenoid Field"

File: solenoid_compensation_24apr20.pptx

- 1. FFQs = Final Focusing Quads
- 2. Discussion [slide 16]:
 - (a) What is the limit on the closed orbit offset in the FFQs allowed by the dynamic aperture and FFQ multipoles?
 - (b) Can independent vertical kickers be integrated into the two forward ion dipoles? [See item 4.]
 - (c) Can vertical kicker be integrated into the first rear ion FFQ? [See item 4.]
 - (d) Is the interaction plane rotation by about 0.05 mrad okay with physics? [Note, the value given is for the highest beam energies, the interaction plane rotation is larger at lower beam energies.] [See item 3.]
 - (e) Suggestion: Case 4 for upstream, Case 0/2 for downstream.
 - (f) Comments, suggestions?
- 3. E.C. Aschenauer: [Re: item 2(d)] Interaction plane rotation of <1 mrad is probably okay. Will discuss in integration meeting.
- 4. H. Witte: [Re: item 2(b)] Integrating vertical kickers into forward proton/ion dipoles may be doable, [Re: item 2(c)] but integrating them into the rear proton/ion final focusing quad probably isn't feasible.
- 5. B. Parker: Are the orbit kicks closed?

2 All other business

None

3 Draft agenda for Friday, May 1, 2020 from 2:30 to 3:30 p.m.

- 1. Impact on detector of introducing solenoid field, discussion re. (cont.)—V. Morozov
- 2. Rear, low β quads—H. Witte
- 3. All other business