

EIC IR Design Meeting

Draft Minutes for Friday, July 24, 2020

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1 CDR progress updates

1. A. Jentsch will update plots.
2. C. Hetzel will add a paragraph on what will be expanded on in the coming months.
3. H. Witte will update IR figures and magnet tables.
4. Q. Wu will update text this coming week.
5. The delete sec. 3.1.6 “Betatron Tune Dependence on Electron Beam Intensity.”
6. M. Sullivan will update the synchrotron radiation section.

2 Interaction region modification for low energies—V. Morozov

Title: “EIC 1st IR DFD Configuration for Low CM Energy”

File: [1st IR DFD design v2.pptx](#)

1. 1st IR refers to the one currently planned.

3 Updates to electron beamline—C. Hetzel

Title: “IR Meeting 200724 - Hetzel”

File: [IR Meeting 200724 - Hetzel.pptx](#)

4 Rear quadrupoles—H. Witte

Title: “Q1ApR/Q1eR”

File: [2020-07-23_Q1ApR_Q1eR.pdf](#)

1. Major aperture reductions thanks to C. Hetzel’s latest design.
2. More space between inner coils and inner surface of beam pipe.
3. Summary [slide 11]
 - (a) Big improvement
 - (b) Plenty temperature margin
 - (c) No crosstalk
 - (d) Mechanical alignment ok?
 - i. Magnetic shimming looks promising
 - (e) Should confirm apertures
 - (f) Re-design rear side magnets
 - i. Q1ApR, Q1eR
 - ii. Q1BpR, Q2eR
 - iii. Q2pR, B2eR ?

5 All other business

None.

6 Draft agenda for Friday, July 31, 2020 from 2:30 to 3:30 p.m.

1. CDR section writing updates
2. Cross check on beam pipe apertures—M. Sullivan
3. All other business

Contact H. Witte or W. Christie to be added to the agenda.