

EIC IR Design Meeting

Draft Minutes for Friday, March 27, 2020

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1 β^* constraints from physics requirements—E.C. Aschenauer

1. Need the same horizontal and vertical acceptances.
 - (a) Reducing discrepancy between horizontal and vertical acceptance would be desirable.
2. C. Montag: Matching divergence will reduce luminosity.
3. Friends from Physics are looking at it and will come back to us with their desired parameter sets.

2 Yellow report

1. E.C. Aschenauer: User group's desire for a second detector
 - (a) Cost estimates
 - (b) Luminosity can be split between two detectors if the IRs are the same type, but they cannot be run in parallel otherwise (e.g. the red and blue luminosity line scenario from F. Willeke).
 - (c) Maybe a short (approx. 2 page) FAQ or wiki on IRs would be helpful.

3 Dynamic aperture—C. Montag

Title: "60 degree 10 GeV DA with all errors and momentum range"

File: [200206_YN.pptx](#)

1. Longitudinal oscillations are included, but synchrotron radiation was not.

2. Initial launch conditions are the curves.
3. 14 s transverse, 0.8 % momentum offset.
4. Some seeds were unstable.

4 Luminosity monitor—J. Adam

Title: “Luminosity monitor and low Q^2 tagger”

File: [JA-Lumi_and_tagger_20200327.pdf](#)

1. Will be making a more detailed design.

5 All other business

None

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

1. Update on existing RHIC survey information—M. Ilardo and G. McIntyre
2. Deuterium tracking—A. Jentsch
3. All other business