

VERY preliminary Version

IR Layout for the CDR of the LHeC

Following chapters are foreseen:

We will need contributions for three different IR options:

the 10 degree Version ring ring

the 1 degree Version ring ring

the linac ring Version

Optik:

p-Optik in the Interaction Region

e-Optik “ “

Parameter list including the achievable e-emittance & Lumi

Beam beam tune shift ... for the LHC nominal / ultimate / upgrade parameters

Geometry:

Beam Separation at the IR (IP2 or IP8)

... for the nominal & upgrade bunch spacing

? Bypass geometries ? (may belong to the Accelerator chapter and not to the IR)

Synchrotron Light:

Power spectrum, Ecrit

Absorber Design, mainly to protect the Experiment

Magnet Design:

Exotic magnets in the IR ... for the proton beam

... for the electron beam

Detector Geometry

Integration of accelerator components into the detector design

Beam pipe layout

Forward detectors

Possible author list ... hopelessly incomplete (as I presume !!!) :

B. Holzer	}	p & e-optics beam beam tuneshift dynamic aperture
A. Kling (hopefully)		
J. Jowett		
M. Fitterer		
T. Pieloni (?)		
W. Herr (?)		

B. Holzer	}	Geometry IP 8
H. Burkhardt		Geometry Bypass
R. Tomas		
F. Zimmermann		Geometry Linac Ring

B. Nagorny (hopefully) Synchrotron radiation

S. Russenschuck et al Magnet design

U. Schneekloth	}	Detector Geometry for 1 and 10 degrees
P. Kostka		
A. Polini		
P. van Mechelen		
R. Wallny		

R. Appleby et al	1 degree option p-optics, e-optics & geometry
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