Joint DESY and University of Hamburg Accelerator Physics Seminar

Tuesday, 14.03.2017

(16:00 in Room 459/30b)

eRHIC Design Status

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Abstract

The electron–ion collider eRHIC aims at an electron–proton luminosity in the range from 10^{32} to 10^{33} $\mathrm{cm^{-2}sec^{-1}}$, ugradeable to 10^{34} $\mathrm{cm^{-2}sec^{-1}}$, over a center–of–mass energy range from 30 to 140 GeV. To minimize the technical risk the design is based on existing technologies and beam parameters that have already been achieved routinely in hadron–hadron collisions at RHIC, and in electron–positron collisions elsewhere. This design has evolved considerably, and a high level of maturity has been achieved. The latest design status will be presented, and an overview of studies towards evaluating the feasibility will be given.

W.Hillert (Univ. HH) and M.Vogt (MFL).

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