Status of LHeC CDR

Remarks at Convenors and Steering Group Meeting on the Physics Chapters

Max Klein, 22.10.2010

Some recent steps

SPC – Council – ICHEP at Paris : made LHeC a project more known

LHeC is on the official Long Range Plan of NuPECC, while ECFA awaits report.

Bi-weekly accelerator (and detector) design meetings (cf web): some convergence 10-20 people present each time.

Have ring design (optics, IR optics [10°], magnet prototypes, ..)

Have two linac design optics (Jlab, BNL) and to choose

Have made great detector progress and yet see much work still around beam pipe, synchrotron radiation and magnet configuration. Various experts invited for contributions

Physics Today

Problems

Logo

Collaboration

Detector name

IR

LHeC Notes

SAC

Time

From now to print

- 1. Yesterday 134 pages submitted to svn
- 2. 12/13.11. Workshop
- 3. 18.11. Reports at Seattle EIC Workshop
- 4. 26.11. Report to ECFA
- 5. End of January: complete draft to referees
- 6. Spring 2011: Print
- 7. EPS Grenoble: start of European strategy debate

QCD/electroweak:

Guido Altarelli, Alan Martin, Vladimir Chekelyan

BSM:

Michelangelo Mangano, Gian Giudice, Cristinel Diaconu

eA/low x

Al Mueller, Raju Venugopalan, Michele Arneodo

Detector

Philipp Bloch, Roland Horisberger

Interaction Region Design

Daniel Pitzl, Mike Sullivan

Ring-Ring Design

Kurt Huebner, Sasha Skrinsky, Ferdinand Willeke

Linac-Ring Design

Reinhard Brinkmann, Andy Wolski, Kaoru Yokoya

Energy Recovery

Georg Hoffstatter, Ilan Ben Zvi

<u>Magnets</u>

Neil Marx, Martin Wilson

Installation and Infrastructure

Sylvain Weisz

Referees

Invited by CERN (SB): 1.10.

ALL agreed to join, perhaps half will attend the workshop

KH: CDR – Design Study?

RB et al: Specify Task – done on 20.10.

Workshop

12/13.11.2010: Chavannes de Bogis: Final Workshop before CDR

Aims:

- Review physics and designs with final plots and numbers
- Identify still problematic areas
- Inform and involve new people, notably the referees

1.5 days

Friday Plenary open 9-10: SB, TN, JJ, MK

3 times 2.5 h parallel sessions

[10.15-12.45; 14.00-16.30; 17.00-19.30]

20:00 dinner – CERN!

Saturday Plenary Summary [9-13.00]

QCE, BSM, HPD -10.30-11 coffee

DET, LR, RR, 11-12.30

conclusion

Steps towards CDR Completion

Plots/results by 12.11. – to be presented at the workshop

Text by end of November (or before..)

Internal editing until end of January → copy to referees [convenors and steering group meeting Tuesday 11.1. or Friday 14.1.]

Convenors: asked to check and edit their chapters

Main editors were determined: Stefano, Oliver, Max with Paul L

Help in reading and editing very welcome

Feb/March: interaction with referees, followed by completion

April: DIS11 at Jlab. Firm deadline for print: 13.5.2011

Finally

I am convinced this will be a very serious document to support the future of deep inelastic scattering at the energy frontier.

It is clear that all our authors and many of you make an extraordinary effort to get this done at high quality, I know that CERN is very thankful for this.

The CDR has to make the context of the LHeC clear and its steps towards eN collisions at the LHC. IF CERN and the worldwide community want this to happen, a different way of organisation has to be set up soon. We have always been told for this the CDR was needed. We are close.