# 2nd CERN-ECFA-NuPECC Workshop on the LHeC



# **Report of Contributions**

Registration

Contribution ID: 0 Type: not specified

## Registration

Tuesday, 1 September 2009 12:30 (1h 30m)

Contribution ID: 1 Type: not specified

## **LHeC Steering Group Report**

Tuesday, 1 September 2009 15:30 (30 minutes)

Presenter: KLEIN, Max (Liverpool)

Session Classification: Opening

Accelerator Overview

Contribution ID: 2 Type: not specified

### **Accelerator Overview**

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Physics Overview

Contribution ID: 3 Type: not specified

# **Physics Overview**

Contribution ID: 4

Type: not specified

# Expected NC and CC data at the LHeC and PDF extractions (TBC)

**Presenter:** KLEIN, Max

Contribution ID: 5

Type: not specified

# QCD and electroweak fits of NC and CC data at the LHeC

Primary author: GWENLAN, Claire (University of Oxford)

Contribution ID: 6 Type: **not specified** 

# NNPDF fits of LHeC pseudodata

Presenter: GUFFANTI, Alberto (Freiburg)

Contribution ID: 7 Type: not specified

## SM Higgs cross section with NNPDF LHeC pdfs (TBC)

Presenter: VICINI, Alessandro (Dip. di Fisica Nucleare e Teorica-Universita degli Studi di Pavi)

Contribution ID: 8 Type: not specified

## QCD/EW/QED corrections needed for LHeC

Presenter: PICCININI, Fulvio (Unknown)

Contribution ID: 9 Type: not specified

# Electroweak results and constraints (or ruling out) of models (TBC)

**Presenter:** NANDI, Sumitra (Torino)

Contribution ID: 10 Type: not specified

## alpha\_s determination at LHeC

**Presenter:** KLUGE, Thomas (Department of Physics-Oliver Lodge Laboratory-University of Live)

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Jets in DIS at LHeC

Contribution ID: 11 Type: not specified

## Jets in DIS at LHeC

**Presenter:** BEHR, Joerg

Contribution ID: 13 Type: not specified

## **LHeC Studies with Sherpa**

**Presenter:** HOECHE, Stefan (University of Zurich)

Contribution ID: 14 Type: not specified

# g(x) with heavy flavours at the LHeC based gamma-p colliders

**Presenter:** Dr UNEL, Gokhan (U.C. Irvine)

Welcome addresses

Contribution ID: 15 Type: not specified

### Welcome addresses

Tuesday, 1 September 2009 14:00 (30 minutes)

Presenters: GAARDHOEJE, Jens-Joergen (NBI Copenhagen, NuPECC); BERTOLUCCI, Sergio (CERN); NAKADA,

Tatsuya (EPFL Lausanne, ECFA)

Session Classification: Opening

Contribution ID: 16 Type: not specified

## Particle Physics and the LHeC

Tuesday, 1 September 2009 14:30 (1 hour)

Presenter: QUIGG, Chris (Fermilab)

Session Classification: Opening

Contribution ID: 17 Type: not specified

## Ring-Ring (RR) and Interaction Region (IR)

Tuesday, 1 September 2009 16:30 (30 minutes)

Presenter: HOLZER, Bernhard

Session Classification: Accelerator Overview

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Linac-Ring (LR)

Contribution ID: 18 Type: not specified

## Linac-Ring (LR)

Tuesday, 1 September 2009 17:00 (30 minutes)

**Presenter:** ZIMMERMANN, Frank

Session Classification: Accelerator Overview

Detector

Contribution ID: 19 Type: not specified

#### **Detector**

Tuesday, 1 September 2009 17:30 (30 minutes)

**Presenter:** POLINI, Alessandro

**Session Classification:** Accelerator Overview

Contribution ID: 20 Type: not specified

## LHeC based yp/A Colliders - Luminosity and Physics

Tuesday, 1 September 2009 18:00 (30 minutes)

Presenter: SULTANSOY, Saleh

**Session Classification:** Accelerator Overview

e-RHIC

Contribution ID: 21 Type: not specified

#### e-RHIC

Tuesday, 1 September 2009 18:30 (30 minutes)

Presenter: LITVINENKO, Vladimir

**Session Classification:** Accelerator Overview

Beam-Beam Effects

Contribution ID: 22 Type: not specified

### **Beam-Beam Effects**

Wednesday, 2 September 2009 09:00 (25 minutes)

**Presenter:** HERR, Werner

**Session Classification:** ACC/IRF/DET

IR Design for LR  $\,$ 

Contribution ID: 23 Type: not specified

# IR Design for LR

Wednesday, 2 September 2009 09:25 (25 minutes)

Presenter: TOMAS, Rogelio

**Session Classification:** ACC/IRF/DET

Considerations for RR

Contribution ID: 24 Type: not specified

### **Considerations for RR**

Wednesday, 2 September 2009 09:50 (20 minutes)

**Presenter:** BURKHARDT, Helmut

**Session Classification:** ACC/IRF/DET

Contribution ID: 26 Type: not specified

# Head on beam-beam compensation in a RR eN Collider

Wednesday, 2 September 2009 11:00 (20 minutes)

**Presenter:** MONTAG, Christoph

**Session Classification:** ACC/IRF/DET

Contribution ID: 27 Type: not specified

## Electron Emittance & Lattice Design for the e-Ring

Wednesday, 2 September 2009 11:20 (20 minutes)

Presenter: JOWETT, John

**Session Classification:** ACC/IRF/DET

e-Ion luminosity

Contribution ID: 28 Type: not specified

## e-Ion luminosity

Wednesday, 2 September 2009 11:40 (10 minutes)

Presenter: JOWETT, John

**Session Classification:** ACC/IRF/DET

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e+ / e- Sources

Contribution ID: 29 Type: not specified

### e+ / e- Sources

Wednesday, 2 September 2009 11:50 (20 minutes)

Presenter: RINOLFI, Louis

**Session Classification:** ACC/IRF/DET

Contribution ID: 30 Type: not specified

## **Compton Sources**

Wednesday, 2 September 2009 12:10 (20 minutes)

**Presenter:** YAKIMENKO, Vitaly

**Session Classification:** ACC/IRF/DET

Contribution ID: 31 Type: not specified

## **Recirculating Linacs**

Wednesday, 2 September 2009 14:00 (25 minutes)

**Presenter:** ADOLPHSEN, Chris

Session Classification: ACC

Contribution ID: 32 Type: not specified

## **Energy Recovery Linac Design**

Wednesday, 2 September 2009 14:25 (25 minutes)

Presenter: ZIMMERMANN, Frank

Session Classification: ACC

Contribution ID: 33 Type: not specified

## **Recirculating Linac**

Wednesday, 2 September 2009 14:50 (25 minutes)

Presenter: LITVINENKO, Vladimir

Session Classification: ACC

Contribution ID: 34 Type: not specified

## **Emittance Growth in Recirculating Linacs**

Wednesday, 2 September 2009 15:15 (15 minutes)

Presenter: SUN, Yipeng

Session Classification: ACC

Discussion on Linac

Contribution ID: 35 Type: not specified

### **Discussion on Linac**

Wednesday, 2 September 2009 15:30 (30 minutes)

Session Classification: ACC

Contribution ID: 36 Type: not specified

## Magnet Design for the e-Ring

Wednesday, 2 September 2009 16:30 (20 minutes)

**Presenter:** MOROZOV, Ivan

Session Classification: ACC/IRF

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RF for the e-Ring

Contribution ID: 37 Type: not specified

## RF for the e-Ring

Wednesday, 2 September 2009 16:50 (20 minutes)

**Presenter:** CIAPALA, Ed

Session Classification: ACC/IRF

Contribution ID: 38 Type: not specified

# **Luminosity Measurement**

Wednesday, 2 September 2009 17:10 (20 minutes)

**Presenter:** SCHNEEKLOTH, Uwe

Session Classification: ACC/IRF

Contribution ID: 39 Type: not specified

## SPL as Recirculating Linac for e+ / e-

Wednesday, 2 September 2009 17:30 (30 minutes)

**Presenter:** ESHRAQI, M.

Session Classification: ACC/IRF

Contribution ID: 40 Type: not specified

## **Summary of Previous HPD Meetings**

Wednesday, 2 September 2009 09:00 (30 minutes)

Presenter: COLE, Brian

Session Classification: HPD

Contribution ID: 41 Type: not specified

#### **Nuclear Parton Distributions**

Wednesday, 2 September 2009 09:30 (30 minutes)

Presenter: ESKOLA, Kari

Session Classification: HPD

Contribution ID: 42 Type: not specified

#### **Deviations from DGLAP in HERA Data**

Wednesday, 2 September 2009 10:00 (30 minutes)

**Presenter:** CAOLA, Fabrizio

Session Classification: HPD

Contribution ID: 43 Type: not specified

#### **Diffraction and Vector Mesons and Pseudo-Data**

Wednesday, 2 September 2009 11:00 (20 minutes)

Presenter: NEWMAN, Paul

Session Classification: HPD

Nuclear Diffraction

Contribution ID: 44 Type: **not specified** 

#### **Nuclear Diffraction**

Wednesday, 2 September 2009 12:05 (25 minutes)

**Presenter:** KOWALSKI, Henri

Session Classification: HPD

Contribution ID: 45 Type: not specified

## Predictions for forward jets

Wednesday, 2 September 2009 11:20 (20 minutes)

**Presenter:** KUTAK, Krzysztog

Session Classification: HPD

Contribution ID: 46 Type: not specified

#### **NNPDF** fits of LHeC Pseudodata

Wednesday, 2 September 2009 16:30 (30 minutes)

**Presenter:** GUFFANTI, Alberto

Session Classification: HPD

Contribution ID: 47 Type: not specified

#### Predictions for Low x inclusive LHeC data

Wednesday, 2 September 2009 17:00 (30 minutes)

**Presenter:** ALBACETE, Javier

Session Classification: HPD

Contribution ID: 48 Type: not specified

# Semi-inclusive eA scattering and Final State interactions

Wednesday, 2 September 2009 17:30 (30 minutes)

Presenter: BROOKS, Will

Session Classification: HPD

Contribution ID: 49 Type: not specified

#### Relation between eA and AA at RHIC

Wednesday, 2 September 2009 11:40 (25 minutes)

**Presenter:** ULLRICH, Thomas

Session Classification: HPD

Contribution ID: 50 Type: not specified

## **Detector Requirements low x**

Wednesday, 2 September 2009 14:00 (30 minutes)

Presenter: NEWMAN, Paul

**Session Classification:** DET/IRF/HPD

Contribution ID: 51 Type: not specified

## Si Gas Detector for Tracking

Wednesday, 2 September 2009 14:50 (40 minutes)

**Presenter:** VAN DER GRAAF, Henry

**Session Classification:** DET/IRF/HPD

Contribution ID: 52 Type: not specified

## **High Energy Calorimeters for ILCLIC**

Wednesday, 2 September 2009 15:30 (30 minutes)

**Presenter:** GREFE, Christian

**Session Classification:** DET/IRF/HPD

Contribution ID: 53 Type: not specified

#### **Simulation of Detector in GEANT4**

Wednesday, 2 September 2009 16:30 (15 minutes)

Presenter: KILIC, Adnan

Session Classification: DET

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MagCal Concept

Contribution ID: 54 Type: not specified

# MagCal Concept

Wednesday, 2 September 2009 14:30 (20 minutes)

**Presenter:** GREENSHAW, Tim

**Session Classification:** DET/IRF/HPD

Contribution ID: 55 Type: not specified

## **Discussion of Detector Layout**

Wednesday, 2 September 2009 17:15 (45 minutes)

Session Classification: DET

Contribution ID: 56 Type: not specified

#### **Scenarios and PseudoData**

Wednesday, 2 September 2009 09:00 (15 minutes)

**Presenter:** KLEIN, Max

Session Classification: QCE/NUP

Electroweak Fits (tbc)

Contribution ID: 57 Type: not specified

#### **Electroweak Fits (tbc)**

Wednesday, 2 September 2009 09:15 (15 minutes)

Presenter: GWENLAN, Claire

Session Classification: QCE/NUP

Contribution ID: 58 Type: not specified

#### **Electroweak Precision and New Physics**

Wednesday, 2 September 2009 09:30 (20 minutes)

Presenter: NANDI, Soumitra

Session Classification: QCE/NUP

Contribution ID: 59 Type: not specified

# Prospects for Alpha\_s

Wednesday, 2 September 2009 09:55 (20 minutes)

**Presenter:** KLUGE, Thomas

Session Classification: QCE/NUP

Contribution ID: 60 Type: not specified

## Pdfs and New Physics in pp (tbc)

**Presenter:** PEREZ, Emmanuelle

Contribution ID: 61 Type: not specified

## **SM Higgs with NNPDF**

Wednesday, 2 September 2009 11:00 (20 minutes)

Presenter: VICINI, Alessandro

Session Classification: QCE/NUP

Higgs in ep

Contribution ID: 62 Type: not specified

## Higgs in ep

Wednesday, 2 September 2009 11:40 (30 minutes)

**Presenter:** KUZE, Masahiro

**Session Classification:** QCE/NUP

Higgs in ep

Contribution ID: 63 Type: not specified

## Higgs in ep

Wednesday, 2 September 2009 11:20 (20 minutes)

**Presenter:** KLEIN, Uta

**Session Classification:** QCE/NUP

Jets in DIS

Contribution ID: 65 Type: not specified

## Jets in DIS

Wednesday, 2 September 2009 14:00 (20 minutes)

**Presenter:** BEHR, Joerg

Session Classification: QCE

Studies with Sherpa

Contribution ID: 66 Type: not specified

## Studies with Sherpa

Wednesday, 2 September 2009 14:40 (30 minutes)

Presenter: HOECHE, Stefan

Session Classification: QCE

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c,b,t at the LHeC

Contribution ID: 67 Type: not specified

## c,b,t at the LHeC

Wednesday, 2 September 2009 15:10 (25 minutes)

**Presenter:** BEHNKE, Olaf

Session Classification: QCE

Contribution ID: 68 Type: not specified

## xg from HQ in Gamma-Proton

Wednesday, 2 September 2009 15:35 (25 minutes)

Presenter: GOHKAN, Unel

Session Classification: QCE

Contribution ID: 69 Type: not specified

#### The 4. SM lepton and quark family at ep/yp collliders

Wednesday, 2 September 2009 14:00 (20 minutes)

Presenter: CIFTCI, A. Kenan

Session Classification: NUP

Contribution ID: 70 Type: not specified

## Single production of diquarks at yp collider

Wednesday, 2 September 2009 14:20 (20 minutes)

Presenter: CAKIR, Orhan

Session Classification: NUP

Contribution ID: 71 Type: not specified

# Anomalous Single Top at yp collider

Wednesday, 2 September 2009 14:40 (20 minutes)

**Presenter:** CAKIR, Ilkay Turk

Session Classification: NUP

Contribution ID: 72 Type: not specified

# Jets in Photoproduction

Wednesday, 2 September 2009 14:20 (20 minutes)

Presenters: GLASMAN, Claudia; BEHR, Joerg

Session Classification: QCE

Contribution ID: 73 Type: not specified

#### **Introduction to Current Detector**

Wednesday, 2 September 2009 16:45 (30 minutes)

**Presenter:** KOSTKA, Peter

Session Classification: DET

Accelerator

Contribution ID: 74 Type: **not specified** 

#### Accelerator

Thursday, 3 September 2009 09:00 (30 minutes)

**Presenter:** BRUENING, Oliver

**Session Classification:** Reports from Working Groups

Contribution ID: 75 Type: not specified

## **Interaction region**

Thursday, 3 September 2009 09:30 (30 minutes)

**Presenter:** SCHNEEKLOTH, Uwe

**Session Classification:** Reports from Working Groups

Detector

Contribution ID: 76 Type: not specified

#### **Detector**

Thursday, 3 September 2009 10:00 (30 minutes)

**Presenter:** WALLNY, Rainer

**Session Classification:** Reports from Working Groups

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New Physics

Contribution ID: 77 Type: **not specified** 

## **New Physics**

Thursday, 3 September 2009 11:00 (30 minutes)

**Presenter:** PEREZ, Emmanuelle

**Session Classification:** Reports from Working Groups

Contribution ID: 78 Type: not specified

## **QCD** and **Electroweak**

Thursday, 3 September 2009 11:30 (30 minutes)

**Presenter:** BEHNKE, Olaf

**Session Classification:** Reports from Working Groups

Contribution ID: 79 Type: not specified

# **High Parton Densities**

Thursday, 3 September 2009 12:00 (20 minutes)

Presenter: NEWMAN, Paul

**Session Classification:** Reports from Working Groups

Hbb at LHeC

Contribution ID: 80 Type: not specified

#### **Hbb** at LHeC

Wednesday, 2 September 2009 12:10 (20 minutes)

**Presenter:** MELLADO, Bruce

Session Classification: QCE/NUP

Theoretical systematics

Contribution ID: 81 Type: not specified

## Theoretical systematics

Wednesday, 2 September 2009 09:50 (5 minutes)

Presenter: GAMBINO, Paolo (Turin U and INFN)

Session Classification: QCE/NUP