

1st ECFA-CERN LHeC Workshop



Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome Address

Monday, 1 September 2008 14:00 (15 minutes)

Presenter: ENGELEN, Jos (CERN)

Session Classification: Opening

Contribution ID: 1

Type: **not specified**

Opening Remarks from ECFA

Monday, 1 September 2008 14:15 (15 minutes)

Presenter: MEIER, Karlheinz (Heidelberg)

Session Classification: Opening

Contribution ID: 2

Type: **not specified**

Opening Lecture - "Deep Inelastic Scattering in the LHC time"

Monday, 1 September 2008 14:45 (1 hour)

Presenter: ALTARELLI, Guido (Roma)

Session Classification: Opening

Contribution ID: 3

Type: **not specified**

Steering Group Report

Monday, 1 September 2008 15:45 (45 minutes)

Presenter: KLEIN, Max (Liverpool)

Session Classification: Opening

Contribution ID: 4

Type: **not specified**

Opening Remarks from NuPECC

Monday, 1 September 2008 14:30 (15 minutes)

Presenter: ROSNER, Guenther (Glasgow)

Session Classification: Opening

Contribution ID: 6

Type: **not specified**

Registration

Monday, 1 September 2008 12:30 (1h 30m)

Contribution ID: 9

Type: **not specified**

LHeC Physics Overview

Monday, 1 September 2008 17:00 (1 hour)

Presenter: BRODSKY, Stan

Session Classification: Physics Overview

Contribution ID: **10**

Type: **not specified**

QCD in the High Energy Limit

Monday, 1 September 2008 18:00 (1 hour)

Presenter: BARTELS, Jochen

Session Classification: Physics Overview

Contribution ID: 11

Type: **not specified**

Precision Physics with Parton Distributions

Tuesday, 2 September 2008 09:00 (30 minutes)

Presenter: VOGT, Andreas

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 12

Type: **not specified**

Structure Functions and PDFs at/from LHeC

Tuesday, 2 September 2008 09:30 (20 minutes)

Presenter: KLEIN, Max

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 13

Type: **not specified**

Neural network approach to parton distributions

Tuesday, 2 September 2008 09:50 (20 minutes)

Presenter: ROJO-CHACON, Juan

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 14

Type: **not specified**

Expectations for alpha_s

Tuesday, 2 September 2008 10:10 (20 minutes)

Presenter: KLUGE, Thomas

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 15

Type: **not specified**

Heavy Flavour and Jet Observables at the LHeC

Tuesday, 2 September 2008 11:00 (20 minutes)

Presenter: BEHNKE, Olaf

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 16

Type: **not specified**

Forward Jets/Parton Cascade Dynamics at LHeC (tbc)

Tuesday, 2 September 2008 11:40 (20 minutes)

Presenter: JUNG, Hannes

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: 17

Type: **not specified**

More Low-x Observables at the LHeC

Tuesday, 2 September 2008 11:20 (20 minutes)

Presenter: NEWMAN, Paul

Session Classification: QCD and Low x ep Observables and PDFs

Contribution ID: **18**

Type: **not specified**

Introduction

Tuesday, 2 September 2008 14:00 (30 minutes)

Presenter: PEREZ, Emmanuelle

Session Classification: New Physics at the LHeC

Contribution ID: 19

Type: **not specified**

Excited Fermions

Tuesday, 2 September 2008 14:30 (30 minutes)

Presenter: TRINH, Nguyet

Session Classification: New Physics at the LHeC

Contribution ID: 20

Type: **not specified**

Single Leptoquark Production in pp

Tuesday, 2 September 2008 15:00 (30 minutes)

Presenter: PAPADOPOULOU, Theodora

Session Classification: New Physics at the LHeC

Contribution ID: 21

Type: **not specified**

Gluon density in BFKL:DAF-Pomeron at HERA and its implication for LHC and LHeC

Tuesday, 2 September 2008 14:00 (20 minutes)

Presenter: KOWALSKI, Henri

Session Classification: Parton Saturation at the LHeC - theory and experiment

Contribution ID: 22

Type: **not specified**

Saturation effects in final states and total cross sections due to CCFM with absorptive boundary

Tuesday, 2 September 2008 14:20 (20 minutes)

Presenter: KUTAK, Krzysztof

Session Classification: Parton Saturation at the LHeC - theory and experiment

Contribution ID: 23

Type: **not specified**

5D tiny black holes and perturbative saturation

Tuesday, 2 September 2008 14:40 (20 minutes)

Presenter: SABIO VERA, Agustin

Session Classification: Parton Saturation at the LHeC - theory and experiment

Contribution ID: 24

Type: **not specified**

Establishing/falsifying saturation at LHeC

Tuesday, 2 September 2008 15:00 (20 minutes)

Presenter: ROJO-CHACON, Juan

Session Classification: Parton Saturation at the LHeC - theory and experiment

Contribution ID: 25

Type: **not specified**

Establishing/falsifying parton saturation in low x ep at LHeC

Tuesday, 2 September 2008 15:20 (20 minutes)

Presenter: NEWMAN, Paul

Session Classification: Parton Saturation at the LHeC - theory and experiment

Contribution ID: 26

Type: **not specified**

Higgs -> b bbar Coupling at LHC

Tuesday, 2 September 2008 16:30 (20 minutes)

Presenter: KOAY, Sue Ann

Session Classification: Higgs and Electroweak Physics at the LHC and LHeC

Contribution ID: 27

Type: **not specified**

Backgrounds to Higgs production at the LHeC

Tuesday, 2 September 2008 17:10 (20 minutes)

Presenter: KUZE, Masahiro

Session Classification: Higgs and Electroweak Physics at the LHC and LHeC

Contribution ID: 28

Type: **not specified**

Drell-Yan, new physics and high x PDFs

Tuesday, 2 September 2008 17:30 (20 minutes)

Presenter: PEREZ, Emmanuelle

Session Classification: Higgs and Electroweak Physics at the LHC and LHeC

Contribution ID: 29

Type: **not specified**

Electroweak precision physics before and after LHC

Tuesday, 2 September 2008 17:50 (25 minutes)

Presenter: DEGRASSI, Giuseppe

Session Classification: Higgs and Electroweak Physics at the LHC and LHeC

Contribution ID: **30**

Type: **not specified**

Single Top Production

Tuesday, 2 September 2008 15:30 (30 minutes)

Presenter: BRANDT, Gerhard

Session Classification: New Physics at the LHeC

Contribution ID: 32

Type: **not specified**

Low x QCD with protons and nuclei at LHC

Tuesday, 2 September 2008 16:30 (20 minutes)

Presenter: D'ENTERRIA, David

Session Classification: Low x ep and eA Physics at LHC and LHeC

Contribution ID: 33

Type: **not specified**

What to expect on low x from ATLAS

Tuesday, 2 September 2008 16:50 (20 minutes)

Presenter: CAMPANELLI, Mario

Session Classification: Low x ep and eA Physics at LHC and LHeC

Contribution ID: 34

Type: **not specified**

From ep to AB Collisions

Tuesday, 2 September 2008 17:10 (20 minutes)

Presenter: ARMESTO, Néstor

Session Classification: Low x ep and eA Physics at LHC and LHeC

Contribution ID: 35

Type: **not specified**

Concluding discussion and plans on low x

Tuesday, 2 September 2008 17:50 (1 hour)

Session Classification: Low x ep and eA Physics at LHC and LHeC

Contribution ID: 36

Type: **not specified**

Prompt photons as a tool for nuclear PDFs

Tuesday, 2 September 2008 17:30 (20 minutes)

Presenter: ARLEO, Francois

Session Classification: Low x ep and eA Physics at LHC and LHeC

Contribution ID: 37

Type: **not specified**

Boundary conditions for the Interaction Region design

Monday, 1 September 2008 17:45 (25 minutes)

Presenter: SCHNEEKLOTH, Uwe

Session Classification: Accelerator Overview

Contribution ID: **38**

Type: **not specified**

Interaction Region design for a ring-ring option

Monday, 1 September 2008 18:15 (25 minutes)

Presenter: HOLZER, Bernhard

Session Classification: Accelerator Overview

Contribution ID: 39

Type: **not specified**

Interaction Region design for a ring-linac option

Monday, 1 September 2008 18:40 (25 minutes)

Presenter: TOMAS, Rogelio

Session Classification: Accelerator Overview

Contribution ID: 40

Type: **not specified**

Ring-Linac option: various operation modes and performance reaches

Tuesday, 2 September 2008 09:00 (30 minutes)

Presenter: ZIMMERMANN, Frank

Session Classification: Accelerator & IR Design

Contribution ID: 41

Type: **not specified**

Discussion

Monday, 1 September 2008 17:00 (45 minutes)

Organization of the working groups

Session Classification: Accelerator Overview

Contribution ID: 42

Type: **not specified**

Magnet design issues and options for an LHeC Interaction Region

Tuesday, 2 September 2008 09:30 (30 minutes)

Presenter: RUSSENSCHUCK, Stephan

Session Classification: Accelerator & IR Design

Contribution ID: 43

Type: **not specified**

Operation with large crossing angles and the required CRAB cavity parameters

Tuesday, 2 September 2008 10:00 (30 minutes)

with a comparison to the CRAB cavity design and operation parameters for the LHC Phase II upgrade plans.

Presenter: CALAGA, Rama

Session Classification: Accelerator & IR Design

Contribution ID: 44

Type: **not specified**

Summary of the main parameters for the ring-ring option

Tuesday, 2 September 2008 11:00 (30 minutes)

Presenter: JOWETT, John

Session Classification: Accelerator & IR Design

Contribution ID: 45

Type: **not specified**

Ring-ring layout and bypass design

Tuesday, 2 September 2008 11:30 (30 minutes)

Presenter: BURKHARDT, Helmut

Session Classification: Accelerator & IR Design

Contribution ID: 46

Type: **not specified**

e-RHIC machine aspects

Tuesday, 2 September 2008 14:40 (20 minutes)

Presenter: LITVINENKO, Vladimir

Session Classification: Accelerator & IR & Detector

Contribution ID: 47

Type: **not specified**

IR Design for the e-RHIC project

Tuesday, 2 September 2008 15:00 (20 minutes)

Presenter: MONTAG, Christoph

Session Classification: Accelerator & IR & Detector

Contribution ID: 48

Type: **not specified**

Magnet Options for LHeC detector

Tuesday, 2 September 2008 14:20 (20 minutes)

Presenter: TEN KATE, Herman

Session Classification: Accelerator & IR & Detector

Contribution ID: 49

Type: **not specified**

Active magnets

Tuesday, 2 September 2008 14:00 (20 minutes)

Presenter: GREENSHAW, Tim

Session Classification: Accelerator & IR & Detector

Contribution ID: 50

Type: **not specified**

IR Design:proton optics

Tuesday, 2 September 2008 15:20 (20 minutes)

Presenter: HOLZER, Bernhard

Session Classification: Accelerator & IR & Detector

Contribution ID: 51

Type: **not specified**

IR Design: electron optics

Tuesday, 2 September 2008 15:40 (20 minutes)

Presenter: KLING, Alexander

Session Classification: Accelerator & IR & Detector

Contribution ID: 52

Type: **not specified**

WG Accelerator & IR Design

Contribution ID: 53

Type: **not specified**

contributions

Contribution ID: 55

Type: **not specified**

WG Interaction Region

Planning of the technical design report & conclusions for the Workshop summary on Wednesday morning

Contribution ID: 56

Type: **not specified**

Physics at High Parton Densities (ep and eA)

Wednesday, 3 September 2008 09:00 (30 minutes)

Presenters: ARMESTO, Néstor; NEWMAN, Paul

Session Classification: Reports from Working Groups

Contribution ID: 57

Type: **not specified**

Precision Investigations of QCD and Electroweak Interactions

Wednesday, 3 September 2008 09:30 (30 minutes)

Presenter: BEHNKE, Olaf

Session Classification: Reports from Working Groups

Contribution ID: 58

Type: **not specified**

New Physics at Large Scales

Wednesday, 3 September 2008 10:00 (30 minutes)

Presenter: WEIGLEIN, Georg

Session Classification: Reports from Working Groups

Contribution ID: 59

Type: **not specified**

Detector Design

Wednesday, 3 September 2008 11:00 (30 minutes)

Presenters: POLINI, Alessandro; KOSTKA, Peter; WALLNY, Rainer

Session Classification: Reports from Working Groups

Contribution ID: **60**

Type: **not specified**

Interaction region and Forward/Backward Detectors

Wednesday, 3 September 2008 11:30 (30 minutes)

Presenter: HOLZER, Bernhard

Session Classification: Reports from Working Groups

Contribution ID: **61**

Type: **not specified**

Accelerator Design

Wednesday, 3 September 2008 12:00 (30 minutes)

Presenter: BRUNING, Oliver

Session Classification: Reports from Working Groups

Contribution ID: **62**

Type: **not specified**

Introduction and session organization

Tuesday, 2 September 2008 09:00 (15 minutes)

Presenters: POLINI, Alessandro; KOSTKA, Peter; WALLNY, Rainer

Session Classification: Detector Design

Contribution ID: **63**

Type: **not specified**

Silicon Pixel detectors for Tracking

Tuesday, 2 September 2008 09:15 (45 minutes)

Presenter: WERMES, Norbert

Session Classification: Detector Design

Contribution ID: **64**

Type: **not specified**

RD50 and silicon radiation hardness

Tuesday, 2 September 2008 10:00 (30 minutes)

Presenter: MOLL, Michael

Session Classification: Detector Design

Contribution ID: 65

Type: **not specified**

Present & Future Collider Triggers

Tuesday, 2 September 2008 11:00 (20 minutes)

Presenter: SMITH, Wesley

Session Classification: Detector Design

Contribution ID: **66**

Type: **not specified**

Trigger and displaced vertexing (CDF SVT)

Tuesday, 2 September 2008 11:20 (20 minutes)

Presenter: CERRI, Alessandro

Session Classification: Detector Design

Contribution ID: 67

Type: **not specified**

The CMS Hadron Calorimeter and upgrade scenarios

Tuesday, 2 September 2008 11:40 (20 minutes)

Presenter: SKUJA, Andris

Session Classification: Detector Design

Contribution ID: 70

Type: **not specified**

Detector Design WG open discussion

Contribution ID: 71

Type: **not specified**

Gossip gaseous pixel detector R&D

Tuesday, 2 September 2008 16:30 (30 minutes)

Presenter: KOFFEMAN, Els

Session Classification: Detector design

Contribution ID: 72

Type: **not specified**

CALICE calorimeters for the ILC

Tuesday, 2 September 2008 17:00 (30 minutes)

Presenter: SIMON, Frank

Session Classification: Detector design

Contribution ID: 73

Type: **not specified**

Detector Design WG open discussion

Tuesday, 2 September 2008 17:30 (30 minutes)

Presenter: NN

Session Classification: Detector design

Contribution ID: 74

Type: **not specified**

Space requirements for cavities, Klystrons and power converters in the LHC tunnel/ bypass areas

Tuesday, 2 September 2008 16:30 (20 minutes)

Presenter: LINNECAR, Trevor

Session Classification: Accelerator & IR Design

Contribution ID: 75

Type: **not specified**

Synergies of the required LHeC R&D efforts with other existing projects

Tuesday, 2 September 2008 16:50 (20 minutes)

e.g. CRAB cavities for the LHC Phase II upgrade, cavity design for HIE-Isolde, open mid plane magnet designs etc

Presenter: NN

Session Classification: Accelerator & IR Design

Contribution ID: 76

Type: **not specified**

Polarisation

Tuesday, 2 September 2008 17:10 (20 minutes)

Presenter: BARBER, Desmond

Session Classification: Accelerator & IR Design

Contribution ID: 77

Type: **not specified**

Double Quaid Design

Tuesday, 2 September 2008 17:30 (20 minutes)

Presenters: PAOLONI, Eugenio; BETTONI, Simona

Session Classification: Accelerator & IR Design

Contribution ID: 78

Type: **not specified**

Synchrotron Light

Tuesday, 2 September 2008 17:50 (20 minutes)

Presenter: NAGORNY, Boris

Session Classification: Accelerator & IR Design

Contribution ID: 79

Type: **not specified**

Discussion

Tuesday, 2 September 2008 18:10 (50 minutes)

Session Classification: Accelerator & IR Design

Contribution ID: **80**

Type: **not specified**

Higgs cross sections at LHeC

Tuesday, 2 September 2008 16:50 (20 minutes)

Presenter: KLEIN, Uta

Session Classification: Higgs and Electroweak Physics at the LHC and LHeC