

1st ECFA-CERN LHeC Workshop

Monday 01 September 2008 - Wednesday 03 September 2008

Divonne-les-Bains, France

Programme

Monday 01 September 2008

Registration - Hall d'accueil (12:30-14:00)

Opening - Amphitheatre (14:00-16:30)

- Conveners: Ellis, John

time	title	presenter
14:00	Welcome Address	ENGELLEN, Jos
14:15	Opening Remarks from ECFA	MEIER, Karlheinz
14:30	Opening Remarks from NuPECC	ROSNER, Guenther
14:45	Opening Lecture - "Deep Inelastic Scattering in the LHC time"	ALTARELLI, Guido
15:45	Steering Group Report	KLEIN, Max

Accelerator Overview - Ausone (17:00-19:05)

time	title	presenter
17:00	Discussion	
17:45	Boundary conditions for the Interaction Region design	SCHNEEKLOTH, Uwe
18:15	Interaction Region design for a ring-ring option	HOLZER, Bernhard
18:40	Interaction Region design for a ring-linac option	TOMAS, Rogelio

Physics Overview - Barbilaine (17:00-19:00)

time	title	presenter
17:00	LHeC Physics Overview	BRODSKY, Stan
18:00	QCD in the High Energy Limit	BARTELS, Jochen

Tuesday 02 September 2008

Accelerator & IR Design - Ausone (09:00-12:00)

time	title	presenter
09:00	Ring-Linac option: various operation modes and performance reaches	ZIMMERMANN, Frank
09:30	Magnet design issues and options for an LHeC Interaction Region	RUSSENSCHUCK, Stephan
10:00	Operation with large crossing angles and the required CRAB cavity parameters	CALAGA, Rama
10:30	coffee break	
11:00	Summary of the main parameters for the ring-ring option	JOWETT, John
11:30	Ring-ring layout and bypass design	BURKHARDT, Helmut

Detector Design - Barbilaine (09:00-12:00)

time	title	presenter
09:00	Introduction and session organization	
09:15	Silicon Pixel detectors for Tracking	WERMES, Norbert
10:00	RD50 and silicon radiation hardness	MOLL, Michael
10:30	coffee break	
11:00	Present & Future Collider Triggers	SMITH, Wesley
11:20	Trigger and displaced vertexing (CDF SVT)	CERRI, Alessandro
11:40	The CMS Hadron Calorimeter and upgrade scenarios	SKUJA, Andris

QCD and Low x ep Observables and PDFs - Amphitheatre (09:00-12:00)

time	title	presenter
09:00	Precision Physics with Parton Distributions	VOGT, Andreas
09:30	Structure Functions and PDFs at/from LHeC	KLEIN, Max
09:50	Neural network approach to parton distributions	ROJO-CHACON, Juan
10:10	Expectations for α_s	KLUGE, Thomas
10:30	coffee break	
11:00	Heavy Flavour and Jet Observables at the LHeC	BEHNKE, Olaf
11:20	More Low-x Observables at the LHeC	NEWMAN, Paul
11:40	Forward Jets/Parton Cascade Dynamics at LHeC (tbc)	JUNG, Hannes

Accelerator & IR & Detector - Ausone (14:00-16:00)

time	title	presenter
14:00	Active magnets	GREENSHAW, Tim
14:20	Magnet Options for LHeC detector	TEN KATE, Herman
14:40	e-RHIC machine aspects	LITVINENKO, Vladimir
15:00	IR Design for the e-RHIC project	MONTAG, Christoph

15:20	IR Design:proton optics	HOLZER, Bernhard
15:40	IR Design: electron optics	KLING, Alexander

New Physics at the LHeC - Barbilaine (14:00-16:01)

time	title	presenter
14:00	Introduction	PEREZ, Emmanuelle
14:30	Excited Fermions	TRINH, Nguyet
15:00	Single Leptoquark Production in pp	PAPADOPOULOU, Theodora
15:30	Single Top Production	BRANDT, Gerhard

Parton Saturation at the LHeC - theory and experiment - Amphitheatre (14:00-16:00)

time	title	presenter
14:00	Gluon density in BFKL:DAF-Pomeron at HERA and its implication for LHC and LHeC	KOWALSKI, Henri
14:20	Saturation effects in final states and total cross sections due to CCFM with absorptive boundary	KUTAK, Krzysztof
14:40	5D tiny black holes and perturbative saturation	SABIO VERA, Agustin
15:00	Establishing/falsifying saturation at LHeC	ROJO-CHACON, Juan
15:20	Establishing/falsifying parton saturation in low x ep at LHeC	NEWMAN, Paul

Accelerator & IR Design - Ausone (16:30-19:00)

time	title	presenter
16:30	Space requirements for cavities, Klystrons and power converters in the LHC tunnel/ bypass areas	LINNECAR, Trevor
16:50	Synergies of the required LHeC R efforts with other existing projects	NN
17:10	Polarisation	BARBER, Desmond
17:30	Double Quaid Design	PAOLONI, Eugenio BETTONI, Simona
17:50	Synchrotron Light	NAGORNY, Boris
18:10	Discussion	

Detector design - Foyer des artistes (16:30-19:00)

time	title	presenter
16:30	Gossip gaseous pixel detector R&D	KOFFEMAN, Els
17:00	CALICE calorimeters for the ILC	SIMON, Frank
17:30	Detector Design WG open discussion	NN

Higgs and Electroweak Physics at the LHC and LHeC - Amphitheatre (16:30-19:00)

time	title	presenter
16:30	Higgs -> b bbar Coupling at LHC	KOAY, Sue Ann

16:50	Higgs cross sections at LHeC	KLEIN, Uta
17:10	Backgrounds to Higgs production at the LHeC	KUZE, Masahiro
17:30	Drell-Yan, new physics and high x PDFs	PEREZ, Emmanuelle
17:50	Electroweak precision physics before and after LHC	DEGRASSI, Giuseppe

Low x ep and eA Physics at LHC and LHeC - Barbilaine (16:30-19:00)

time	title	presenter
16:30	Low x QCD with protons and nuclei at LHC	D'ENTERRIA, David
16:50	What to expect on low x from ATLAS	CAMPANELLI, Mario
17:10	From ep to AB Collisions	ARMESTO, Néstor
17:30	Prompt photons as a tool for nuclear PDFs	ARLEO, Francois
17:50	Concluding discussion and plans on low x	

Wednesday 03 September 2008

Reports from Working Groups - Amphitheatre (10:30-14:00)

time	title	presenter
10:30	Physics at High Parton Densities (ep and eA)	
11:00	Precision Investigations of QCD and Electroweak Interactions	
11:30	New Physics at Large Scales	WEIGLEIN, Georg
12:00	coffee break	
12:30	Detector Design	
13:00	Interaction region and Forward/Backward Detectors	
13:30	Accelerator Design	