








# MC group meeting - 22. May 08

		<b>Thursday 22 May 2008</b> from 10:00 to 12:40 chaired by: <b>Hannes Jung (DESY)</b> support: <a href="mailto:hannes.jung@desy.de">hannes.jung@desy.de</a>	
<b>Description:</b> modification key: mcgroup			
		<a href="#">Thursday 22 May 2008</a>	
<b>Thursday 22 May 2008</b>		<a href="#">top</a>	
10:00	Announcemnts (05')	Hannes Jung (DESY)	
10:05	calcualtion of $gg \rightarrow Z q\bar{q}$ in kt-factorisation (20') (  Slides  )	Michal Deak	
10:25	MC@NLO for heavy quarks for ep (20')	Tobias Toll	
10:45	calculation of quark induced processes in kt-factorisation (20') (  Slides  )	Michal Deak	
11:05	status of PDF4MC (20')	Federico Samson-Himmelstjerna	
12:00	discussion on wiki, web based tools etc (20')		
12:20	news from GENSER/HEPMC (10') (  Slides  )	Serguei Levonian	
12:30	further projects (10')		

# MPI@LHC workshop

 <http://www.pa.infn.it/mpi08/index.htm>

## MPI@LHC'08

FIRST INTERNATIONAL WORKSHOP ON MULTIPLE PARTONIC INTERACTIONS AT THE LHC

Perugia, Italy,  
27- 31 October, 2008

Home	Programme	Registration	Registered Participants	Organizing Committee
Accommodation	Guidelines & Travelling	Contacts	Bulletin & Poster	Instructions for Authors



### News & Announce

22/03/08 – [First Bulletin available](#)



Courtesy of David Roberts for  
"Elemental Particles"

**Welcome to the first International Workshop on Multiple Partonic Interactions at the LHC "1st MPI@LHC".**

The objective of this first workshop on Multiple Partonic Interactions (MPI) at the LHC is to raise the profile of MPI studies, summarizing the legacy from the older phenomenology at hadronic colliders and favouring further specific contacts between the theory and experimental communities. The MPI are experiencing a growing popularity and are currently widely invoked to account for observations that would not be explained otherwise: the activity of the Underlying Event, the cross sections for multiple heavy flavour production, the survival probability of large rapidity gaps in hard diffraction, etc. At the same time, the implementation of the MPI effects in the Monte Carlo models is quickly proceeding through an increasing level of sophistication and complexity that in perspective achieves deep general implications for the LHC physics. The ultimate ambition of this workshop is to promote the MPI as unification concept between seemingly heterogeneous research lines and to profit of the complete experimental picture in order to constrain their implementation in the models, evaluating the spin offs on the LHC physics program.

webmaster F.A.



# HERA and the LHC



**HERA AND THE LHC**  
4th workshop on the implications of HERA for LHC physics

**26-30 May 2008**  
**CERN**

**Parton density functions**  
**Multijet final states and energy flow**  
**Heavy quarks**  
**Diffraction**  
**Monte Carlo tools**

**Organising Committee:**  
G. Altarelli (CERN), J. Blümlein (DESY),  
M. Botje (NIKHEF), J. Butterworth (UCL),  
A. De Roeck (CERN) (chair), K. Eggert (CERN),  
T. Haas (DESY), H. Jung (DESY) (chair),  
M. Klein (DESY), M. Mangano (CERN),  
A. Morsch (CERN), G. Polesello (INFN),  
O. Schneider (EPFL), C. Vallee (CPPM)

**Advisory Committee:**  
J. Bartels (Hamburg), M. Della Negra (CERN),  
J. Ellis (CERN), J. Engelen (CERN),  
G. Gustafson (Lund), G. Ingelman (Uppsala),  
P. Jenni (CERN), R. Klanner (DESY),  
L. McLerran (BNL), T. Nakada (CERN),  
D. Schlatter (CERN), F. Schrempp (DESY),  
J. Schukraft (CERN), J. Stirling (Durham),  
W.K. Tung (Michigan State), A. Wagner (DESY),  
R. Yoshida (ANL)

[www.desy.de/~heralhc](http://www.desy.de/~heralhc) [heralhc.workshop@cern.ch](mailto:heralhc.workshop@cern.ch)

- last workshop in this series
- proceedings planned
- can we contribute from MC group ?
  - tuning of generators
  - PDF4MC
  - report from MC group at meeting

# LCG service planning

- the next LCG Generator Services project planning meeting, where we will discuss the plan of work for the next 6 months (second half of 2008), is scheduled for:

Friday 23 May at 9:30 (CET) , room 32-1-A24

EVO videoconference and telephone conference will be available.

# MC group validation

## • GENSER validation (proposal by M. Kirsanov)

Ordinary tests

pythia8

1. EP - conservation, multiplicities M. Kirsanov
2. Cross section of processes (use pythia6 test4 as the list) A. Polyarush
3. Double interactions M. Kirsanov

powheg

1. Basic tests to be defined

tauola

1. Test with Higgs production and decay to tau
2. As 1, but with pythia8

herwig++

1. Improve test1: Z+jet instead of Z M. Kirsanov
2. Print final cross section from the user part
3. Run herwig++ through the ThePEG framework M. Kirsanov?
4. Basic tests: EP - conservation, multiplicities
5. Test with Higgs production and decay to tau (spin correlations as in tauola)
6. Radiative corrections (as in photos)?

# MC group validation

- GENSER validation (proposal by M. Kirsanov)

Ordinary tests

sherpa

1. Basic test with event analysis

photos

1. Test with pythia8

evtgenlhc

1. Test with photos

CASCADE ????

Rivet tests

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# AOB

