# MC school

- Organising Committee:

  H. Jung, J. Katzy, A. Knutsson,

  K. Kutak, S. Levonian and help

  from M. Grimm

  web page:

  http://www.terascale.de/mcs2008

- already now: 27 registrations....

# MC school (program I)

**Monday**

morning: arrival
14:00 – 15:00 Monte Carlo techniques and physics 1 (L. Lonnblad)
15:00 – 15:30 Coffee
15:30 – 16:30 NLO Calculations (Z. Merebashvili)
16:30 – 17:30 Monte Carlo techniques and physics 2 (L. Lonnblad)

**Tuesday**

09:00 – 10:00 Monte Carlo techniques and physics 3 (L. Lonnblad)
10:00 – 10:30 CASCADE H. Jung ) Each generator to give a 15 minute
10:30 – 11:00 PYTHIA T. Sjostrand ) (maximum!) overview followed by a
11:00 – 11:30 Coffee
11:30 – 12:00 HERWIG S. Gieseke ) 15 minute (maximum!) 'simplified
12:00 – 12:30 SHERPA F. Krauss ) user guide'/introduction to tutorial

14:00 – 15:30 Exercises andq practical work (hannes, judith, herwig, pythia,sherpa)
use HEPMC for W/Z pt spectrum
compare PYTHIA / HERWIG / CASCADE /SHERPA
possibly parallel for the generators
15:30 – 16:00 coffee
16:00 – 18:00 Exercisers and practical work
effect of parton shower
possibly parallel for the generators

# MC school (program II)

**Wednesday:**

09:00 – 09:45 MC and NLO (M. Dinsdale)
09:45 – 10:30 Minimum bias/underlying event physics with PYTHIA (T. Sjostrand)
10:30 – 11:00 Coffee
11:00 – 11:45 Spin Correlations with HERWIG (P. Richardson, S. Gieseke)
11:45 – 12:30 Multijet matching (L. Lonnblad)

14:00 – 15:30 Exercises and practical work (L Sonnenschein, hannes, judith,+MCs)
calculation of W/Z, Higgs, top and jet production
compare PYTHIA / HERWIG / CASCADE/ SHERPA / MC@NLO
15:30 – 16:00 coffee
16:00 – 18:00 where are NLO corrections important
where is PS better than NLO, how do different PS compare
effects of UE and MI

**Thursday:**

09:00 – 10:00 Parameter fitting and PDF4MC (A. Knutsson, K.Kutak, H. Hoeth)
10:30 – 11:00 Coffee
11:00 – 12:30 Presentation of comparison of MC generators (Hannes, Judith + all)
End of school

# Comments to school proposal

- MCNET:
  - wanted more clear connection to MCnet
  - MCnet is now mentioned on web page
  - will also include link to school of MCnet in summer (Mcnet/CTEQ school)
  - questions/comments to tutorials..... how they will be organised
- WHIZARD
  - W. Kilian et al were asking to include WHIZARD

- Comment:

  Idea of MC school was to teach basic MC methods and how MC generators do QCD: ME, parton shower, hadronization and underlying events/Multiple interaction

  Next years school should address other issues: BSM etc
- How to proceed – comments ?

# Next steps

- Do advertisement ... need more particpants
- Planing for tutorials

- ... produce Dice game ?

- Any further issues... give input to org.com.