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: 81 registrations....
- still people ask to participate ...

  can we accept a few more ?
- Network:

für die Veranstaltung wird ein eigenes Gästenetz eingerichtet. Dieses Netz wird eine eigene SSID bekommen. Wenn das Netz eingerichtet ist, geben wir diese SSID heraus. Das wird ca. 1 Woche vor der Veranstaltung sein, damit noch Zeit zum Testen ist.

MC school

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
10:30 – 11:00 PYTHIA T. Sjostrand
11:00 – 11:30 Coffee
11:30 – 12:00 HERWIG S. Gieseke
12:00 – 12:30 SHERPA S. Schumann

14:00 – 15:30 Exercises and practical work
15:30 – 16:00 coffee
16:00 – 18:00 Exercisers and practical work

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 (NN)

14:00 – 15:30 Exercises and practical work
15:30 – 16:00 coffee
16:00 – 18:00 RIVET

Thursday:

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

Exercises

- intro to GENSER and HEPMC (only the very essentials, to get started)
- produce executables for the generators
- run ttbar production at LHC
  explain output
  how to extract infos
  fill ROOT tree with HEPMC
  plot:
  - pt and eta of top quark, and compare it with decay products
  - charged particle multiplicity in central region for top events
    also as function of energy deposit in fwd region
  - calculate pt of ttbar pair

  studies:
  - effect of initial & final state PS on pt of ttbar pair
  - effect of initial & final state PS on charged particle multiplicity
  - effect of multiple interactions

- run Higgs production at LHC
  plot pt of Higgs
  - effect of initial and final state PS
  - "jet" (high pt parton) multiplicity

- RIVET
  intro
  run underlying event analysis for Tevatron energies and compare it with MC predictions

- generator specific studies
  ???

Exercises ...

- proposal created some confusion in MCnet ...
  - do not like to interface with big programs ...
  - need to make clear that:
    - using HEPMC is just for the event record
    - using ROOT is just for plotting
  - from our side:
    - important that we have a common frame for the generators
    - do not want to learn plotting package for each generator
    - do not want to learn (at this stage) all the internal generator structures like event records, C++ issues etc ...
- Monday afternoon (31. March):

  telephone meeting with MC authors to plan and discuss exercises

MC school & Exercises

- Need support for the exercises:
  - 4 Wgs with ca 20 persons
  - 4 WGs (PYTHIA, HERWIG, SHERPA, CASCADE)
  - need 3 person/WG for technical support ... 12 persons in total
- Need support from IT for accounts
  - NAF accounts
  - normal afs accounts
- Week: 14-18. April (just before MC school)
  - build execuatbles and test exercises
  - complete and extensive test of exercises
  - please help all...

MC school - AOB

- Dinner/welcome reception
  - strong advice from management:

    only have either welcome reception or dinner

    When ?
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