



# Tools // Sessions

## Introduction



### OUTLINE

- I. « Common Tools & Methods » Working Group
- II. News & Announcement



# I. Introduction



- **Particular approach:**

Balanced efforts on studies & developments of Tools for both:

- **Higgs/SUSY/ED Signals**

And

- **SM Backgrounds!!!**

⇒ Better handle of the standard candles (calibrations, alignment,...)

⇒ Better modeling of the backgrounds => assessment of BSM signals

- Webpage: [http://www-clued0.fnal.gov/~muanza/SUSY\\_Tools\\_Group.html](http://www-clued0.fnal.gov/~muanza/SUSY_Tools_Group.html)

- Mailing List: [GDRSUSY-UTIL@IN2P3.FR](mailto:GDRSUSY-UTIL@IN2P3.FR)

- **Thanks for this large audience and the many contributions**

⇒ **add'l session wrt to original plans!!!**

- **We encourage you to contribute to the future group activities and especially for the 4-year report which is due by next summer**



# I. Introduction



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ULB - Université Libre de Brux... EuroGDR SUSY 2007 in Br...

**Tuesday 13 November 2007**

12:30 Lunch (FORUM )

15:30

**1. Tools for Higgs & SUSY**

16:00->18:30 **Tools** (Convener: Margarete Muenneither (CERN/LAPTH Annecy) , Steve Muanza (IPN Lyon) ) (Location: 2 NO 707)

16:00 Introduction (05) Steve Muanza (IPN Lyon)

16:05 FeynHiggs: The Swiss Army Knife for MSSM Higgs Physics (20) ( Sven Heinemeyer (IFCA (CSIC-UC, Santander)) , Sven Heinemeyer (IFCA, Santander) Slides )

16:25 Feyn Tools for SUSY (20) ( Slides ) Thomas Hahn (MPI, Munich)

16:45 XSUSY, a multipurpose program for calculations in SUSY models with non-minimal flavour violation (20) ( Benjamin Fuks (U. Freiburg) Slides )

17:05 The Sherpa Monte Carlo for physics beyond the SM (25) Steffen Schumann (U. of Edinburgh)

17:30 Extra jet radiation in inclusive SUSY samples and SM backgrounds (20) ( Slides ) S. de Visscher (UCL, Louvain)

17:50 FeynRules: New models phenomenology made easy (20) ( Slides ) C. Duhr (UCL, Louvain)

18:10 Yukawa Unification in SUSY SO(10) (20) Sezen Sekmen (METU, Ankara)

20:00 Banquet (Taverne du Passage ( Taverne du Passage ) )

**Wednesday 14 November 2007**

**2. Tools for SM & ED**

09:00->10:30 **Tools** (Convener: Margarete Muenneither (CERN/LAPTH Annecy) , Steve Muanza (IPN Lyon) ) (Location: 2 NO 707)

09:00 Update on Alpgen (25) Fulvio Piccinini (INFN and U. Pavia)

09:25 Validation of MC generators for top-pair physics in CMS (20) Roberto Chierici (IPN Lyon)

09:45 Tools for Extra-Dimensions (20) ( Slides ) Helenka Przysiezniak (LAPP, Annecy)

10:05 Precision predictions for Z' production at the CERN LHC: QCD, matrix elements and joint resummation (20) ( Qiang Li (ITP, Karlsruhe) Paper )

10:30

**3. Tools for Indirect Searches & Common Methods**

11:00->12:40 **Tools** (Convener: Margarete Muenneither (CERN/LAPTH Annecy) , Steve Muanza (IPN Lyon) )

11:00 SuperIso and new constraints from B physics (20) Nazila Mahmoudi (Uppsala U.)

11:20 Recent development of micrOMEGAs (20) A. Pukhov (SINP, Moscow)

11:40 Status of Tools for Limits Setting (20) Fabrice Couderc (DAPNIA CEA, Saclay)

12:00 Introduction on Jet Issues (10) Joey Huston (MSU, East Lansing)

12:05 SpartyJet (20) Pierre-Antoine Delsart (LAPP, Annecy)

12:40 Lunch (FORUM )

15:45 Farewell coffee

Démarrer EuroGDR SUSY ... XnView - [Browser ... FR 11:12

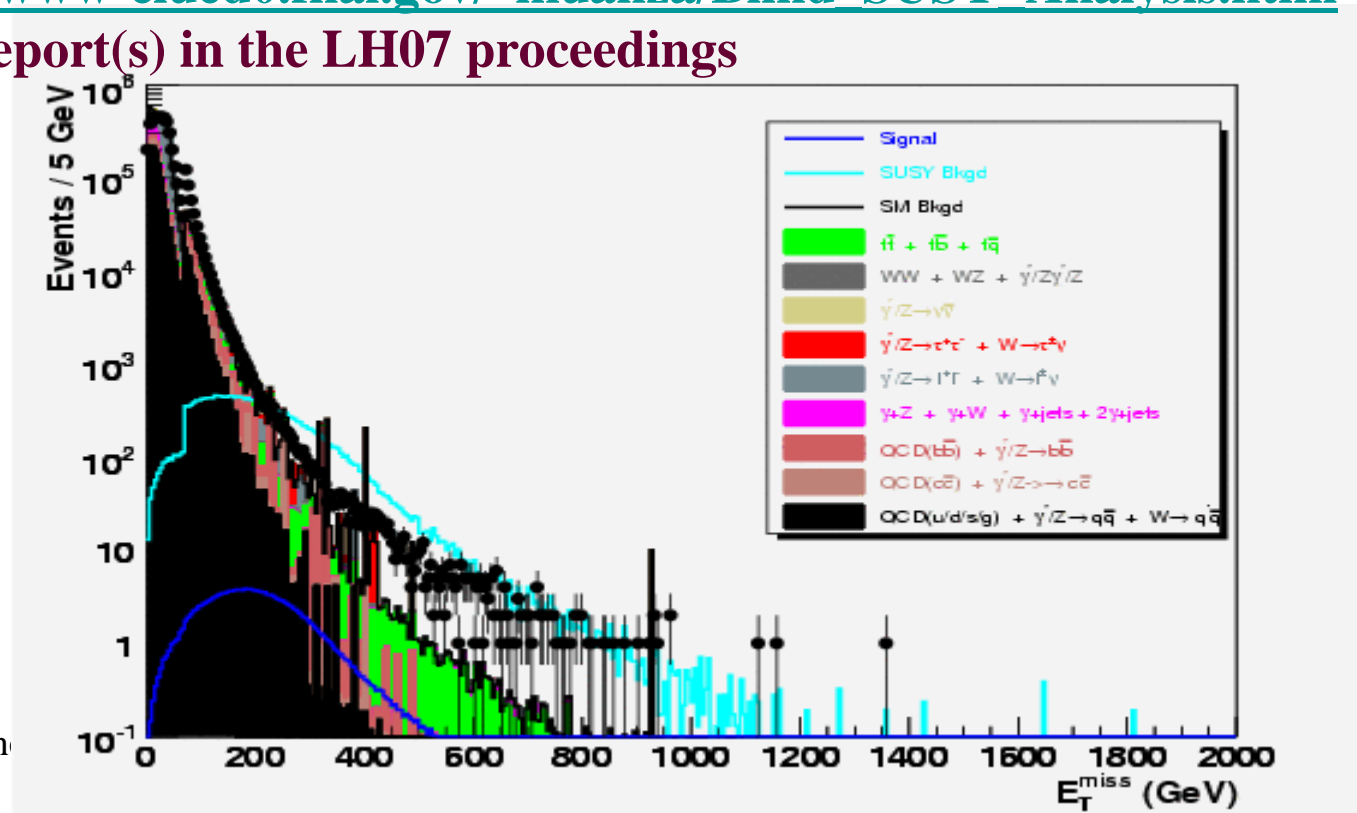


# II. News & Announcement



## News:

- The « Blind SUSY Search Project » :
  - If you think you can find SUSY @ the LHC, try this over simplified challenge and... **win a bottle a champagne!!**
  - Anyone can participate: just need to analyse provided samples w/ ROOT (produce your SUSY templates w/ Pythia+FastSim)
  - Project Webpage:**  
[http://www-clued0.fnal.gov/~muanza/Blind\\_SUSY\\_Analysis.html](http://www-clued0.fnal.gov/~muanza/Blind_SUSY_Analysis.html)
  - Report(s) in the LH07 proceedings**





## II. News & Announcement



### News:

1. The « Blind SUSY Search Project » (cont'd):

- **Main practical problem: Access to the data**
- **The 4.5 M evts of the PsD<sub>1</sub> can be downloaded from the webpage**
- **For the background:**
  - **Stored on tapes @ CCIN2P3**
  - **I transferred the 160 Mevts (~0.5 Tb) of background files to N. Arkani-Hamed group in Harvard**
  - **+ copy on external disk**
- **Found a good technical solution @ CCIN2P3:**
  - **« SRB »: [http://cc.in2p3.fr/article524.html?var\\_recherche=SRB](http://cc.in2p3.fr/article524.html?var_recherche=SRB)**
  - **Participants have to send me a mail to get permissions and to install an SRB client on their PC**
  - **This will enable transparent & easy files transfer**
  - **I'll make all the files available by the end of next week**