

# Welcome to the 3rd Top Workshop @ Grenoble: from the Tevatron to ATLAS

## Organizing Committee :

Marc BESANCON.....(Dapnia, Saclay)  
Martine BOSMAN.....(IFAE, Barcelona)  
Matteo CACCIARI.....(LPTHE, Paris)  
Julien DONINI.....(LPSC, Grenoble)  
Arnaud LUCOTTE.....(LPSC, Grenoble)  
Antonio ONOFRE.....(LIP, Portugal)  
Dominique PALLIN.....(LPC, Clermont)  
Gerard SAJOT.....(LPSC, Grenoble)

## With the local support from:

Jocelyne RIFFAULT....(LPSC, Grenoble)  
Anic VEY.....(LPSC, Grenoble)  
Christian FAVRO.....(LPSC, Grenoble)

# Top workshop : from the TeVatron to ATLAS

## Goals and scope of the workshop

- 1) Have an overview of the methods/techniques used in Top Physics
  - Discuss the tricks & tips used in the TeVatron analyses
  - Discuss the commissioning tools/analyses with data
  - Compare / Discuss TeVatron and ATLAS foreseen strategies
  
- 2) Have a detailed overview of the top measurement analyses
  - Last year : statistical tools and methods to measure top mass
  - This year :
    - Put the emphasis on the top cross-section analyses techniques and on the systematic uncertainty estimates
    - Mention the plans to use top quark as a probe to New physics
  
- 3) Have an overview of the MonteCarlo generators used in Top Physics
  - Last updates from the main generators
  - Constraints from (TeVatron, LHC) data, ISR/FSR, UE tuning

# Top Workshop : Agenda

Thursday 23 October 2008

[top](#) ↑

12:00

Welcome Coffee

## 13:40->15:00 Workshop welcome and Introduction

13:40 Welcome (05')

13:45 Top Quark Physics from the TeVatron to the LHC (25')

Un-Ki Yang (*Manchester Univ., UK*)

14:10 Status of the machine (25')

Gianluigi Arduini (*CERN*)



14:35 Status of the ATLAS detector (25')

Manuella Vinciter (*Carleton Univ.*)

## 15:00->19:00 Tools commissioning with data (Convener: Julien Donini (*LPSC Grenoble*), Gerard SAJOT (*LPSC*))

15:00 b-tagging commissioning in Dzero (30')

Sebastien Greder (*IPHC*)

15:30 b-tagging commissioning strategy in ATLAS (30')  Slides 

Richard Hawkings (*CERN*)

16:00

break

16:15 Light jet and b jet energy scale and calibration with data in CDF (40') Monica D'onofrio (*IFAE Barcelona*)

16:55 Jet reconstruction and energy scale determination in ATLAS (30')

Ariel Schwartzman (*SLAC*)

17:25 Top trigger strategies in ATLAS (25')

Attila Krasznahorkay (*CERN*)

17:50 Top reconstruction algorithms in ATLAS (25')

Gustaaf Brooijmans (*Columbia Univ.*)

18:15 Root analysis and implications to analysis model in ATLAS (25')

Akira Shibata (*New York Univ.*)

**09:00->12:30 Top cross-section measurements** (Convener: Marc Besancon (CEA-Saclay/DSM/Irfu/SPP), Martine Bosman (IFAE, Barcelona))

- |       |   |  |
|-------|---|--|
| 09:00 | Determination of the top pair cross-sections in lepton+jets at the TeVatron (20') | Marc-Andre Pleier (Bonn Univ.)               |
| 09:20 | Determination of the top pair cross-section in the dilepton channel @ Dzero (20') | Slava Sharyy (CEA/IRFU Saclay)               |
| 09:40 | Determination of top pair cross-section in the full hadronic channel @ CDF (20')  | Gabrielle Compostella (INFN)                 |
| 10:00 | Top pair cross-section in the tau decay modes @ Dzero (20')                       | Dhiman Chakraborty (Northern Illinois Univ.) |
| 10:20 | break   |  |
| 10:35 | Top pair cross-section with missing transverse energy @ CDF (20')                 | Giorgio Cortiana (Munich)                    |
| 10:55 | Strategy for top pair cross-section measurements in ATLAS (30')                   | Duc Bao Ta (Bonn Univ.)                      |
| 11:25 | Single-top evidence : how do we got there @ CDF (30')                             | Bernd Stelzer (FNAL)                         |
| 11:55 | Single-top in ATLAS : strategies for an evidence with the first data (20')        | Julien Donini (LPSC Grenoble)                |

12:30 Lunch

**14:00->19:00 Theory and MC generators for Top Physics** (Convener: Matteo Cacciari (LPTHE Paris), Anne-Isabelle ETIENVRE (CEA-DAPNIA))

- |       |   |  |
|-------|---|--|
| 14:00 | Introduction : Top quark physics in MC generators (40')       | Fabio Maltoni (Univ. Louvain)          |
| 14:40 | POWHEG generator (30')  | Paolo Nason (INFN Milan)               |
| 15:10 | ALPGEN generator for top physics (30')                        | Fulvio Piccinini (INFN Pavia)          |
| 15:40 | break   |  |
| 16:10 | SHERPA generator (30')  | Marek Schoenherr (Dresden)             |
| 16:40 | MADGRAPH (30')  | Rickert Frederix (Univ. Louvain)       |
| 17:10 | Tuning of ISR/FSR and underlying event in MC generators (25') | Liza Mijovic (University of Ljubljana) |
| 17:35 | W+jets MC and constraints from data (20')                     | Samuel Calvet (LAL)                    |

18:45 Banquet

# Top Workshop : Agenda

Saturday 25 October 2008

[top](#)↑

09:00->12:30 **Top quark mass & properties measurements and searches beyond Standard Model** (Convener: Antonio Onofre (*LIP, Portugal*) , Dominique PALLIN (*LPC*) )

- |       |  |   |
|-------|--|---|
| 09:00 | Top mass measurements @ TeVatron (30')   | Kirsten Tollefson ( <i>Michigan State Univ.</i> ) |
| 09:30 | Strategies for top mass measurement with the early data in ATLAS (30')             | Antoine Marzin ( <i>CEA/IRFU</i> )                |
| 10:00 | Determination of top properties @ TeVatron (30')                                   | Charles Plager ( <i>UCLA</i> )                    |
| 10:30 | break  |   |
| 10:45 | Anomalous couplings in top pair and single-top production @ TeVatron and LHC (30') | Juan Antonio Aguilar-Saavedra                     |
| 11:15 | Search for top quark resonances and rare decays (20')                              | Marcel Vos ( <i>IFIC Valencia</i> )               |
| 11:35 | Top physics strategy @ LHC with the early data (20')                               | Martine Bosman ( <i>IFAE, Barcelona</i> )         |

**Presentation Uploading → Manage Passd « top2008 »**  
**Talk on USB → please see the conveners prior to the session**

# Top Workshop : WIFI

## WIFI connection

- Accessible from the amphitheater and outside

→ Use « Wifi Access ». You will be automatically directed to :

<http://lpsc0024x/wifiaccess/index.php?langue=english>

→ **Passwd : 9ee5**

## LPSC's Network access.



You are ..

Please choose a language

Choisissez une langue



[English](#)



[French](#)

**N.B. :**

*If you are a member of the LPSC and this is your own computer please click the 'Visitor' button and select yourself as 'Contact'.*

# Top Workshop : WIFI

## WIFI connection

- Accessible from the amphitheater and outside

→ Use « Wifi Access ». You will be automatically directed to :

<http://lpsc0024x/wifiaccess/index.php?langue=english>

→ **Passwd : 9ee5**

## Conference : Workshop Top Physics

(from Thursday 23rd of October 2008 to Saturday 25th of October 2008)

Please fill in the following form ...

your Firstname : \*

your Lastname : \*

WiFi Access Key : \*

(The WiFi access keycode is available to the reception)

\* : required Fields

### Computer Use Policy

I accept the Laboratory's [Computer Use Policy](#).

YES

NO

Send

Clear

9ee5

# Top Workshop : Banquet

## Banquet on Friday night

- Diner is scheduled at 20h00
- Meeting Point at the Telepherique Entrance (see your map) at 19h30
- Gerard Sajot will be there to give you the pass to access the cabin
- Return at 23h00

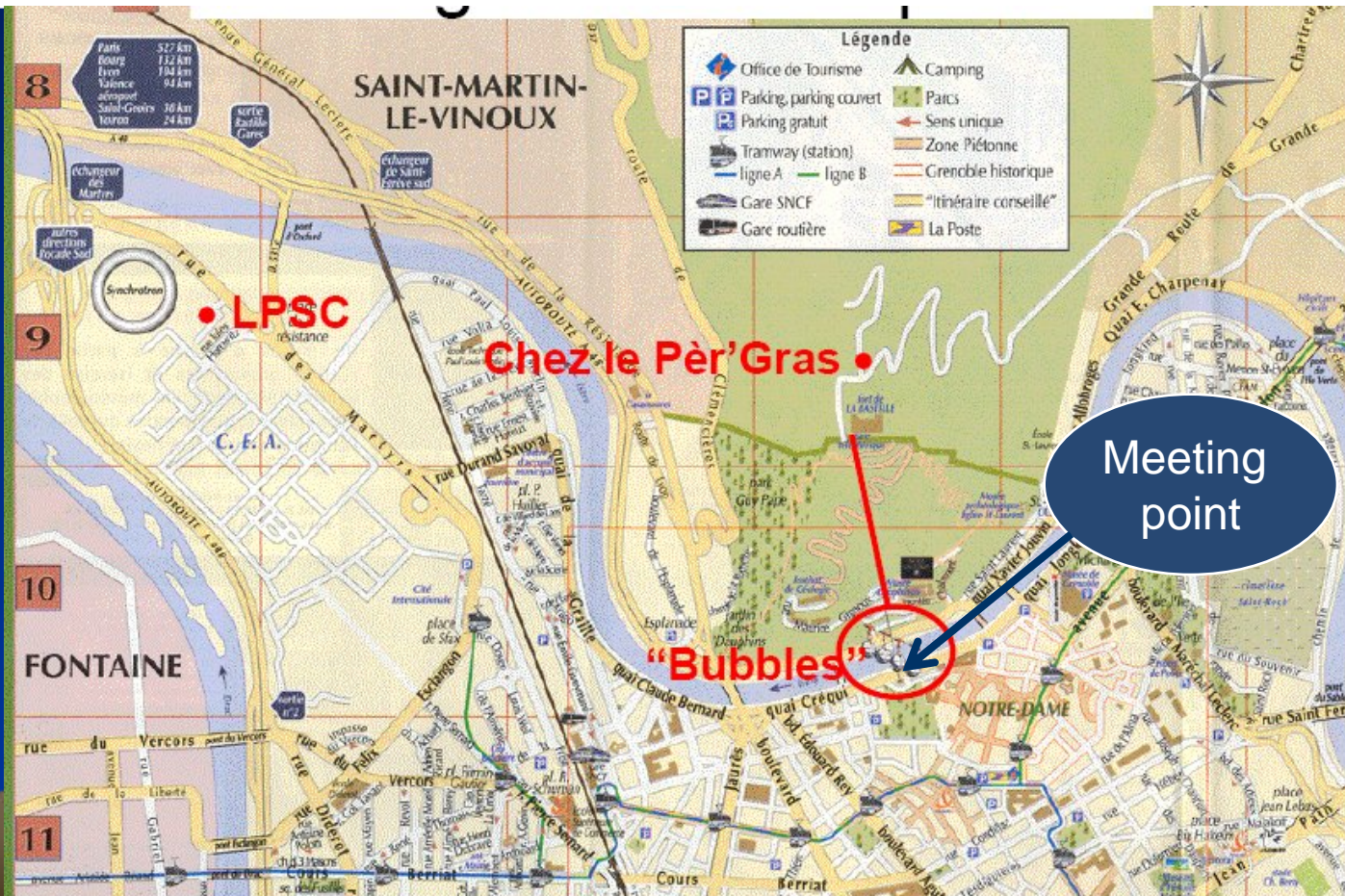




# Top Workshop : Banquet

## Banquet on Friday night

- Diner is scheduled at 20h00
- Meeting Point at the Telepherique Entrance (see your map) at 19h30



# Top Workshop : Practical matters

## Reimbursement for invited speakers

- Please provide us (Gerard, Arnaud) the documents / forms required for your reimbursement to take place  
→ By Friday noon
- Documents will be transmitted to the administration staff

## Room

- « Grande salle du conseil » is available from tomorrow morning; Located in front of the amphitheater.
- a very few cable connections available from there

## In case of problem

- please see Gerard Sajot, Julien Donini or myself