



**DØ**

**CEA-Saclay/Irfu/SPP**

**group**

I r f u  
cea  
saclay



U. Bassler



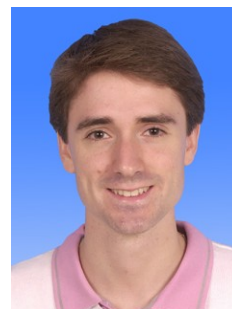
M. Besançon



E. Chapon



F. Couderc



A. Croc



F. Déliot



C. Deterre



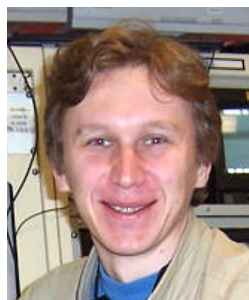
D. Vilanova



A. Grohsjean



B. Tuchming



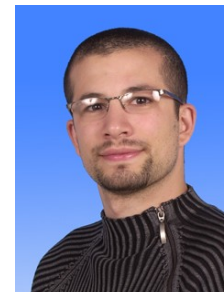
M. Titov



V. Sharyy



C. Royon



R. Madar



P. Lutz



Z. Hubacek



## **D0 CEA-Saclay/Irfu/SPP group**

- **member of the D0 collaboration since 1983**  
**only french group present at Run 1**
- **fund agency: CEA** ( Commissariat à l'Energie Atomique et aux Energies Alternatives )
- **currently biggest french group**
  - **10 permanents (~ 6.6 FTE)**  
6 habilitations or equivalent  
**working on embedding A. Falkowski (Theory Lab Orsay) at Saclay**
  - **2 post-docs : 1 Higgs, 1 top (A. Grohsjean contract ended May 1011)**  
5 post-docs already performed in the D0-Saclay group at Run 2 (2 top, 1 Higgs, 2 QCD)  
2 hired at Saclay, 1 in Louvain, 1 back in Prague, 1 in Stony Brook
  - **4 PhD students** (2 being mixed D0/Atlas) : **2 Higgs, 2 top**  
2 theses to be defended in June and September 2011  
7 D0-Saclay PhD theses already defended at Run 2 (3 top, 2 BSM, 1 Higgs, 1 QCD)  
1 hired at SPP Saclay, 1 hired at CEA, 1 post-doc at CMS, 1 in teaching, 3 out of academics  
**working on providing funds for 2 new PhD to start in fall 2011 (1 top, 1 Higgs)**



## **DØ CEA-Saclay/Irfu/SPP group**

### **- Saclay group members convenorship at DØ at Run 2**

**Currently: top double top, V+jets, Calgo, Tau-ID**

**Past: QCD, top dilepton, W muon, CSG/CAF, JES, Muon-ID, muon task force**

### **- other present and past responsibilities and committee involvements**

**Dq-calo, DØ authorship, DØ speakers bureau**

### **- Saclay group members in DØ editorial boards at Run 2**

**Chair : EB014 (BSM, Higgs multilepton final states)**

**Membership: EB001 (QCD), EB03 (EW), EB05 (Higgs), EB010 (top)  
EB012 (BSM), EB020 (BSM), EB022 (top), EB036 (lumi)**



# Current Data analyses in the **DØ CEA-Saclay/Irfu/SPP group**

## - **top physics:** expect O(6) or more publications in 2010 - 2011

$\sigma(t\bar{t})$  in 1+jets and dilepton channels

$M_{top}$  ME method, from Xsection measurement and Tevatron combination

$R_b$  dilepton channel

spin correlations, ME method dilepton channel

## - **Higgs boson(s) physics:** expect O(4) or more publications in 2011

BSM Higgs :  $\tau_e\tau_\mu$  and  $\tau_\mu\tau_{had}b$  channels (+ combinations ?)

SM Higgs :  $H \rightarrow WW(ee, \mu\mu)$  and  $H(\mu\tau_{had})$  channels (+ combinations ?)

## - **QCD physics:** expect 2 publications in 2011

Jets Xsection production vs pT (PRD version) and diffractive jets Xsection

**O(12) or more DØ publications with saclay group members  
as primary authors in 2010-2011**



## **DØ CEA-Saclay/Irfu/SPP group**

- **expect some manpower evaporation and/or LHC vs DØ fraction changes after summer 2011 and Moriond 2012**

2 PhD student switching to Atlas in 2011 and 2012

- **keep the focus on top and Higgs physics but adapt to the actual situation in particular if funding for new PhD students is there**

top physics : legacy

A\_FB in dilepton (A. Falkowski + 1 new PhD student DØ/Atlas)

SM Higgs :  $H \rightarrow WW(ee, \mu\mu)$  (1 new PhD student )

- **important and internal-CEA-specific budget cut in 2011 (expected to be worse in 2012)**