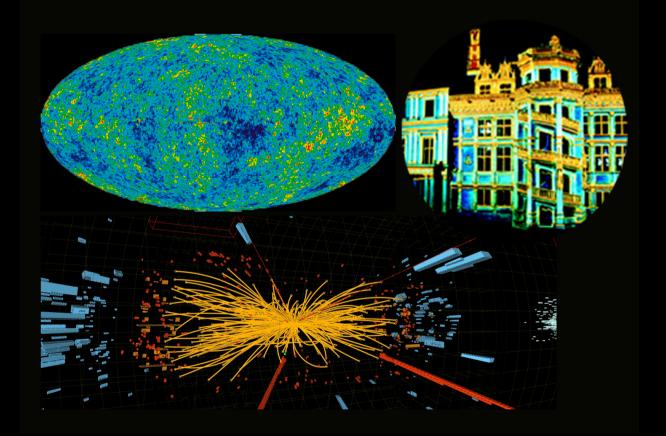
# Welcome to Blois 2015



Karl Jakobs, University of Freiburg

### XXVIIth Rencontres de Blois Château de Blois, May 31 - June 5, 2015

### Particle Physics & Cosmology

The standard model in particle physics, and beyond Production properties of the Higgs boson New trends in astrophysics and cosmology The search for dark matter and dark energy Neutrinos in the laboratory and the universe

Programme Committee Etienne Augé, Orsay Univ., France Ludwik Celnikier, Obs. de Paris, France Jodi Cooley, SMU, Dallas, USA Jacques Dumarchez, LPNHE, France Yannick Giraud-Héraud, APC, France Christophe Grojean, ICREA/IFAE, Spain and DESY, Germany Karl Jakobs, Univ. of Freiburg, Germany Sotiris Loucatos, Irfu-CEA and APC, France Boaz Klima, FNAL, USA Thomas Lohse, Humboldt Univ., Germany Silvia Pascoli, Durham Univ. UK Bolek Pietrzyk, LAPP, Annecy, France Chung-I Tan, Brown University, USA Jean Trân Thanh Vân, Orsay Univ., France Giulia Zanderighi, CERN, Switzerland and Oxford University, Uk

new models new physics new techniques

http://blois.in2p3.fr/2015/index.htm

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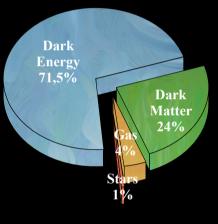
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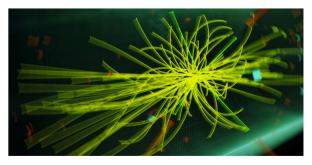
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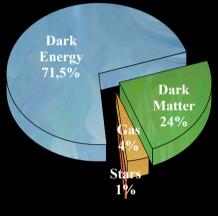


### Le boson de Higgs découvert avec 99,9999 % de certitude

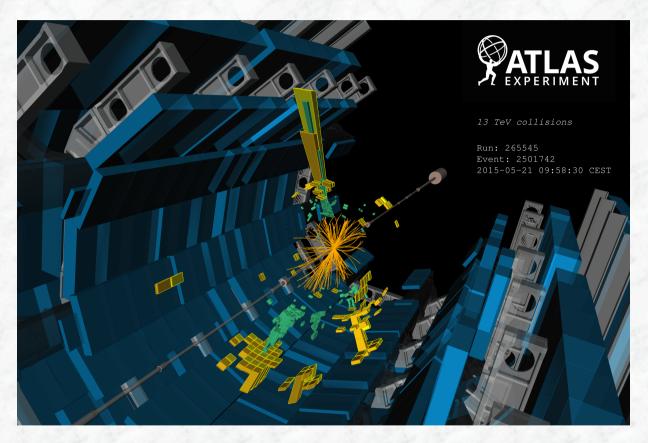
Le Monde | 04.07.2012 à 09h26 • Mis à jour le 04.07.2012 à 13h39 | Par David Larousserie - Genève, envoyé spécial



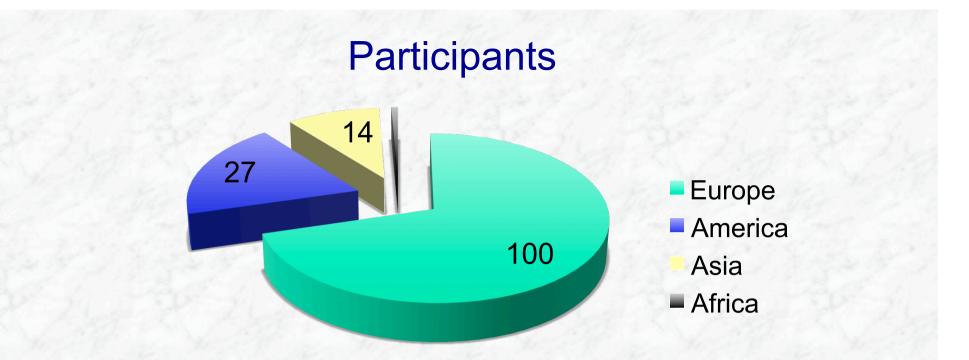
Cette fois, il n'y a plus de doute. Une nouvelle particule a bien été découverte au Centre européen de recherche nucléaire (<u>CERN</u>), près de Genève, grâce à l'accélérateur de particules LHC et ses deux principaux détecteurs, Atlas et CMS



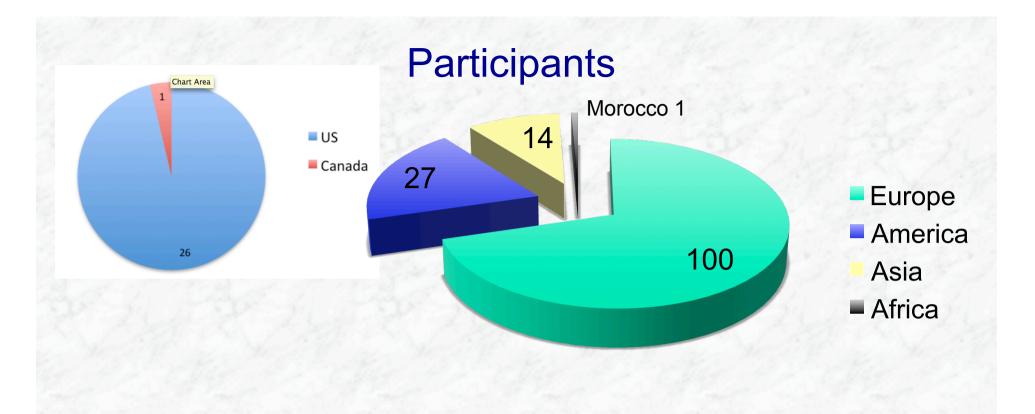
#### The LHC will start operation at $\sqrt{s} = 13$ TeV this week

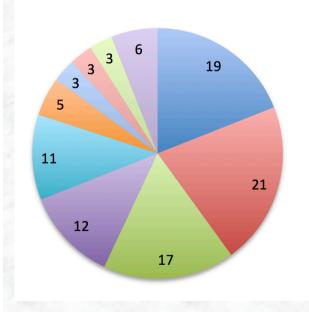


A proton-proton collision at 13 TeV, recorded during a test phase by the ATLAS experiment on 21. May 2015



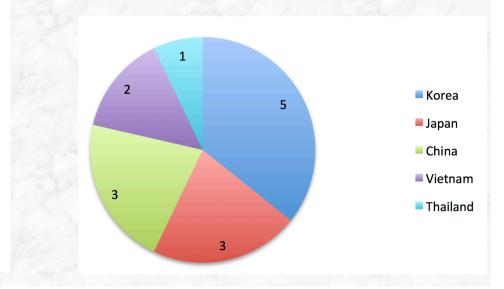
### 142 participants







- Germany
- UK
- CERN/Switzerland
- Italy
- Spain
- Russia
- Belgium
- Netherlands
- Others



### **Program Committee**

A handful of people worked very hard for many months to make it an interesting and exciting conference:

Etienne Augé, IN2P3 Paris, France Ludwik Celnikier, Obs. de Paris, France Jodi Ann Cooley-Sekula, SMU, Dallas, USA Jacques Dumarchez, LPNHE, France Yannick Giraud-Héraud, APC, France Karl Jakobs, Univ. Freiburg, Germany Christophe Grojean, ICREA Barcelona, Spain, and DESY Hamburg, Germany Sotiris Loucatos, CEA, France Boaz Klima, FNAL, USA Thomas Lohse, Humboldt Univ., Germany Silvia Pascoli, Durham Univ., UK Bolek Pietrzyk, LAPP, Annecy, France Chung-I Tan, Brown University, USA Jean Trân Thanh Vân, Orsay Univ., France Giulia Zanderighi, CERN and Oxford, UK

Please don't hesitate to ask them for help on anything
Comments / feedback on the program are much appreciated

## Some organisational issues

All sessions will be held in the Chateau – it's your home for the next five days!

•

- All plenary sessions will be held in this room
- The parallel sessions will be held in this and nearby rooms
  - Few last-minute changes follow Indico or posts on bulletin boards around
- Please bring your talk/file on a stick to the chair before the session starts
- All lunches and dinners are served in the big room behind me
- Coffee, juice and cookies ("Coffee Breaks") are served in the big room downstairs (ground floor)
- Internet is available downstairs not here!
   Remember, you are in this room to listen to very interesting talks and exciting discussions...

#### Some organisational issues (cont.)

- Today's special attractions:
  - 17:15 Conference Photo (downstairs in the courtyard)
  - 18:00 Visit of the Chateau (in small groups; assemble @courtyard)
- Every night Sound and Light show (@courtyard) starts at 10pm (on Wednesday in English)

#### Some organisational issues (cont.)

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- Conference Summary Speaker

Gavin Salam (many thanks!)



## Today's Program

#### First Session - Gaston d'Orléans (10:15-12:30)

- Conveners: Jakobs, Karl

time [id] title	presenter
10:15 [137] The LHC in Run 2, status and plans	LAMONT, Mike
11:00 [136] Neutrino Astronomy	HALZEN, Francis
11:45 [205] Holography: from black holes to condensed matter	SON, Dam Thanh

#### The Higgs Boson - Gaston d'Orléans (14:00-16:30)

time	[id] title	presenter
14:00	[117] Higgs boson production at the LHC	PETERS, Krisztian
14:30	[118] The Higgs boson profile	GOMEZ-CEBALLOS, Guillelmo
15:00	Coffee break	
15:30	[119] Exotic Higgs boson decays	SHELTON, Jessie <mark>(</mark> Julia)
16:00	[127] Higgs boson, BSM interpretations	MASSO SOLER, Eduard

