

# Welcome ...

## iCSC

Inverted CERN School of Computing, 24-25 February 2014

# iCSC

*"Where students turn into teachers"*

Involving former CSC participants to  
deliver advanced education

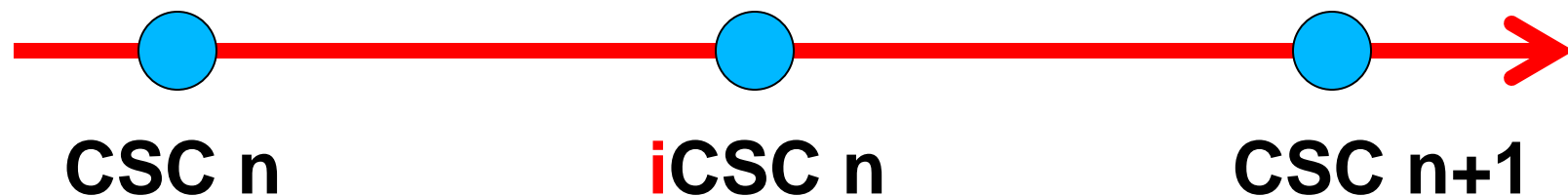
# The CERN School of Computing

- **Aims at creating a common culture in scientific computing among young scientists and engineers involved in particle physics or other sciences, as a strategic direction to favor mobility and to facilitate the development of large computing-oriented transnational projects.**
  - <http://cern.ch/csc>
- **Participants come from worldwide laboratories and universities with typically of 15 to 30 different nationalities (60 different nationalities over the past 10 years).**
  - <http://cern.ch/csc/alumni>

# Why an inverted CSC ?

- At regular CSCs, the sum of the knowledge of the students often exceeds the one of lecturer teaching, and that it is frequent to find in the room real experts on particular topics. This is the idea behind iCSC.

## Reversing the roles

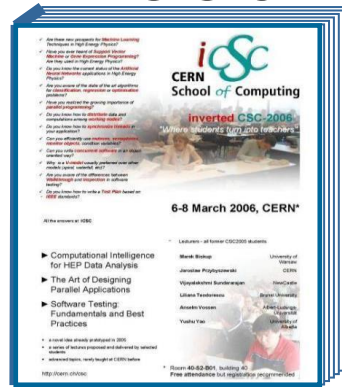


# It is the 6<sup>th</sup> edition in 9 years ...

## 2005



## 2006



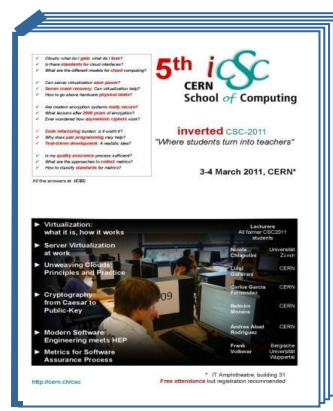
## 2008



## 2010



## 2011



## 2013



# The inverted CSC

- At the end of each main school, we call students present to make proposals. When we receive sufficient proposals of appropriate quality, we organize an inverted school.



- The students combine their skills and elaborate on CSC related subjects.

# Lecturers at the iCSC

- **42 lectures so far ... and 5 this year**
- **3 former iCSC lecturers have become lecturers at the main school**
  - (Sebastian – iCSC 2005, Andrzej – iCSC 2008, Benjamin – iCSC2010)

# This year programme

- **Topics**
  - LAN Programming, building distributed systems
  - Web API
  - A journey from quark to jet
  - Read-Out Electronics: where data come from
  - Machine learning and data mining
- **Speakers from CSC 2013, Nicosia**
  - Francesco, Jonas, Josef, Juan Lopez, and Tyler



# selection process for lectures

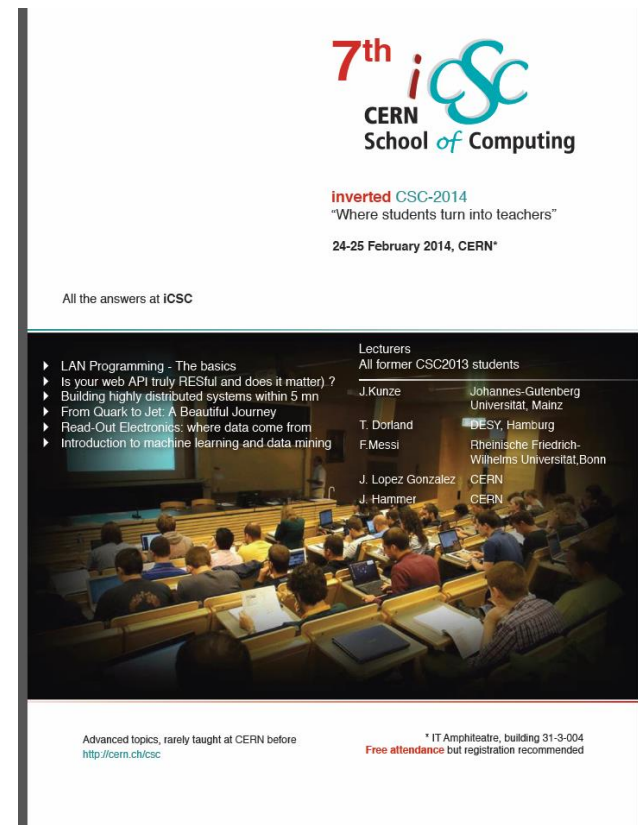
- **Discussion at the main school, lightning talks**
- **Proposal after the main school**
- **Review by the CSC Advisory committee**
- **Lecture preparation and development with mentors**
  - (2 mentors for each lecturer)
- **Presentation at the school**

# This year's mentors

- **Francois Fluckiger and Sebastian Lopienski**
  - for Jonas Kunze
- **Ivica Puljak and Are Strandlie**
  - for Tyler Mc Millan
- **Pere Mato Vila and Alberto Pace**
  - for Francesco Messi
- **Lorenzo Moneta and Andrzej Nowak**
  - for Juan Lopez Gonzalez
- **Sebastian Lopienski and Giuseppe Lo Presti**
  - for Joseph Hammer

# Booklet

- A printed booklet is available to all registered participants
- Few extra copies are available



**7th iCSC**  
CERN School of Computing

**inverted CSC-2014**  
"Where students turn into teachers"  
24-25 February 2014, CERN\*

All the answers at ICSC

<ul style="list-style-type: none"> <li>▶ LAN Programming - The basics</li> <li>▶ Is your web API truly RESTful and does it matter? *</li> <li>▶ Building highly distributed systems within 5 min</li> <li>▶ From Quark to Jet: A Beautiful Journey</li> <li>▶ Read-Out Electronics: where data come from</li> <li>▶ Introduction to machine learning and data mining</li> </ul>	<p>Lecturers All former CSC2013 students</p> <table border="0"> <tr> <td>J.Kunze</td> <td>Johannes-Gutenberg Universität, Mainz</td> </tr> <tr> <td>T. Dorland</td> <td>DESY, Hamburg</td> </tr> <tr> <td>F.Messi</td> <td>Rheinische Friedrich- Wilhelms Universität, Bonn</td> </tr> <tr> <td>J. Lopez Gonzalez</td> <td>CERN</td> </tr> <tr> <td>J. Hammer</td> <td>CERN</td> </tr> </table>	J.Kunze	Johannes-Gutenberg Universität, Mainz	T. Dorland	DESY, Hamburg	F.Messi	Rheinische Friedrich- Wilhelms Universität, Bonn	J. Lopez Gonzalez	CERN	J. Hammer	CERN
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Advanced topics, rarely taught at CERN before  
<http://cern.ch/csc>

\* IT Amphitheatre, building 31-3-004  
**Free attendance** but registration recommended

# The next event

- **The CSC 2014**
- **Braga, Portugal**
- **Registration will open next week**

- <http://cern.ch/csc>

CERN  
School of Computing



2014

25 August to 05 September 2014 in Braga, Portugal



*Organized in collaboration with  
Minho University, Braga, Portugal*

**Director**

Alberto Pace, CERN

**Local Organising Committee Chair**

Antonio Manuel Da Silva Pina  
Vitor Serafim Pereira Oliveira

**Technical Manager**

Giuseppe Lo Presti, CERN

**School Administrator**

Yasemin Hauser, CERN

E-mail: [computing.school@cern.ch](mailto:computing.school@cern.ch)

**Deadline for Application  
2nd May 2014**

**Base Technologies  
Data Technologies  
Physics Computing**

**Lecturers**

François Rüddiger, CERN, Geneva, Switzerland  
Benedikt Hegner, CERN, Geneva, Switzerland  
Robert G. Jacobsen, University of California at Berkeley, USA  
Sverre Jarp, CERN, Geneva, Switzerland  
Sebastian Lopienski, CERN, Geneva, Switzerland  
Pere Mato, CERN, Geneva, Switzerland  
Andrzej Nowak, CERN, Geneva, Switzerland  
Alberto Pace, CERN, Geneva, Switzerland  
Andreas J. Peters, CERN, Geneva, Switzerland  
Danilo Piparo, CERN, Geneva, Switzerland  
Ivica Puljak, University of Split, Croatia  
Arnulf Quadt, Universität Göttingen, Germany  
Benjamin Radburn-Smith, Purdue University, West Lafayette, USA

[www.cern.ch/CSC](http://www.cern.ch/CSC)