

Welcome to tCSC 2018

Thematic
CERN
School *of* Computing



High Throughput Distributed Processing of Future HEP Data

3-9 June 2018
Split, Croatia



Sveučilište u Splitu
University of Split



tCSC 2018 Opening Ceremony

Sunday June 3, 15:30

“Welcome to University of Split and FESB”

by prof. Simun Andjelinovic, rector University of Split
by prof. Sven Gotovac, dean of FESB

“Welcome to Croatia, Dalmatia and Split”

by prof. Ivica Puljak, University of Split
(and chair of CSC Advisory Committee)

“Computing challenges for LHC”

by Frédéric Hemmer, CERN IT department head

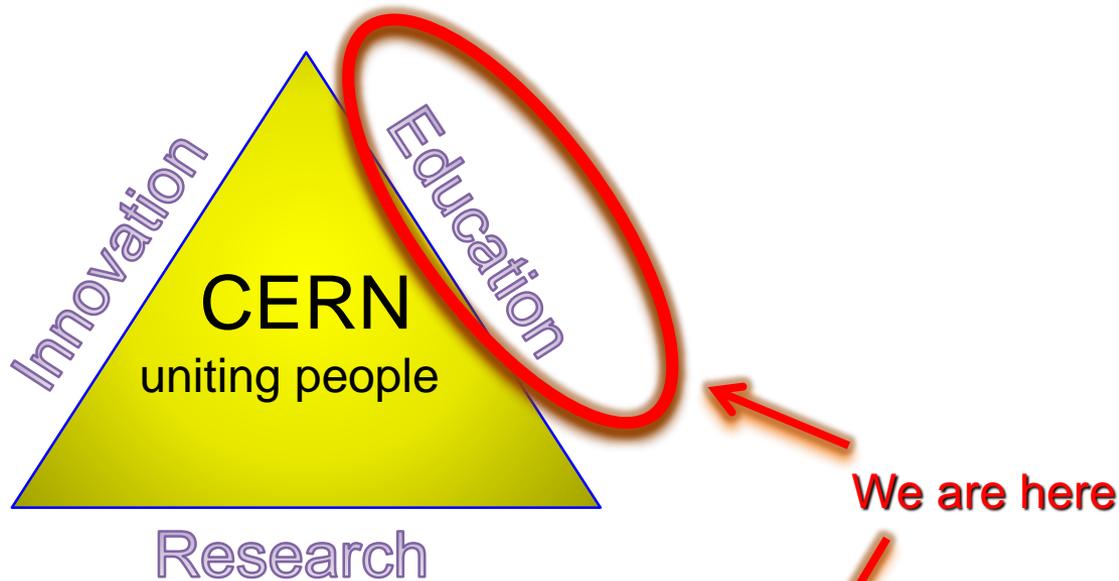
“Introduction to CERN School of Computing”

by Sebastian Łopieński, CERN, CSC director

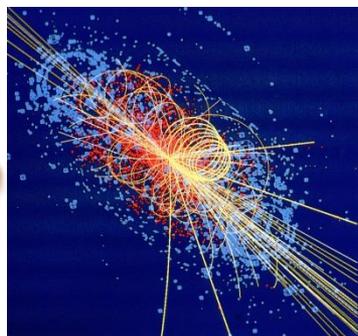
Introduction to the School

Sebastian Łopieński, CSC director

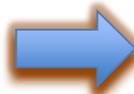
CERN's mission



Accelerating beams
(accelerators)



Detecting particles
(experiments)



Large-scale
computing
(analysis)



Discovery

CERN's three main schools

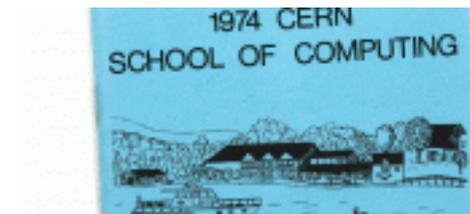
CERN Accelerator School (CAS)

CERN School of Physics

CERN School of Computing (CSC) ← We are here

A school with a long history

- The school was created in **1970**
 - 41st edition in 2018
- **2700** students of ~80 different nationalities have followed the school
 - usually 50-80 per year
 - alumni web site: <http://cern.ch/CSC/alumni>
- The school has visited 21 countries
 - <http://cern.ch/CSC/past-schools>
 - recent: Spain, Belgium, Greece, Portugal, Cyprus, Sweden



Mandate and mission

Create a **common culture in scientific computing** among young scientists and engineers involved **in particle physics or other sciences**, as a strategic direction to **promote mobility** and to facilitate the development of **large computing-oriented transnational projects**.

Bridging science and computing

- Technological evolution in computing empowers science
 - especially in data-intensive domains such as High Energy Physics
 - **computing is the main strategy** for many scientific fields to do research efficiently on a large scale
- It is nowadays essential that:
 - **scientists master computing technologies** as a main tool for their research
 - **computer engineers understand the scientific needs** in order to deliver computing services to research projects

Academic dimension

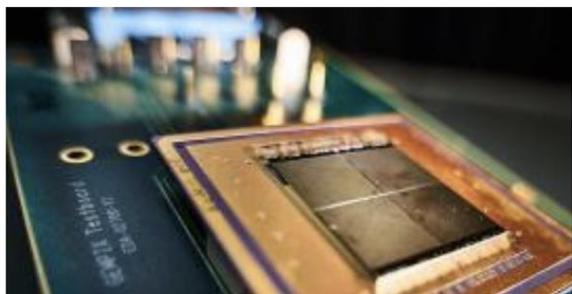
CERN School of Computing...

- is **not a conference**
 - lecturers do not present their work or promote their projects
- is **not a training session**
 - not a replication of training courses commonly available at home institutes
 - focus on persistent knowledge, less on know-how



Three CERN Schools of Computing

iCSC 2018



Inverted school

5 Mar - 8 Mar 2018

[CERN](#) | Geneva | Switzerland

tCSC 2018



Thematic school

3 Jun - 9 Jun 2018

[MEDILS](#) | Split | Croatia

CSC 2018



Main school

1 Oct - 14 Oct 2018

[Tel Aviv University](#) | Tel Aviv | Israel



We are here

6th Thematic CSC

- In a partnership with **University of Split, FESB** (Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture)
- 1 week (5.5 days of tuition)
 - 12 hours of **lectures**
 - 12 hours of **exercises**
 - 1 **guest lecture**, 1 **special evening talk**
 - a session of **student presentations**
- **Clear goals:**
 - Academic dimension
 - Theory and practice
 - Networking and socialising

6th Thematic CSC – programme

<https://indico.cern.ch/event/689372/page/12457-academic-programme>

“High Throughput Distributed Processing of Future HEP Data”

- 3 tracks:

- *Technologies and Platforms*

- by **Andrzej Nowak**, TIK Services, Switzerland



- *Parallel, Optimised Software Development*

- by **Danilo Piparo**, CERN
and **Sebastien Ponce**, CERN



- *Effective I/O for Scientific Applications*

- by **Sebastien Ponce**, CERN



But what gives the most value
to the School?

28 participants

<https://indico.cern.ch/event/689372/page/12464-participants>

- 12 different nationalities
- 18 different institutes from 9 countries
- 2 BSc, 2 MSc students, 4 MSc, **19 PhD students**, 1 PhD
- 50%-50% computer science vs. physics
- **no female participant this year** 😞
- 6 students from previous main CSC students (2017, 2016)
- 3 local students from FESB, University of Split
- **Diverse, talented, passionate for science and technology**



POLITECNICO DI MILANO



Imperial College London



Science & Technology Facilities Council



THE UNIVERSITY of MANCHESTER



UNIVERSITÀ DEGLI STUDI DI MILANO



TECHNISCHE UNIVERSITÄT DARMSTADT

RWTH AACHEN UNIVERSITY



Ernst-Abbe-Hochschule Jena
University of Applied Sciences

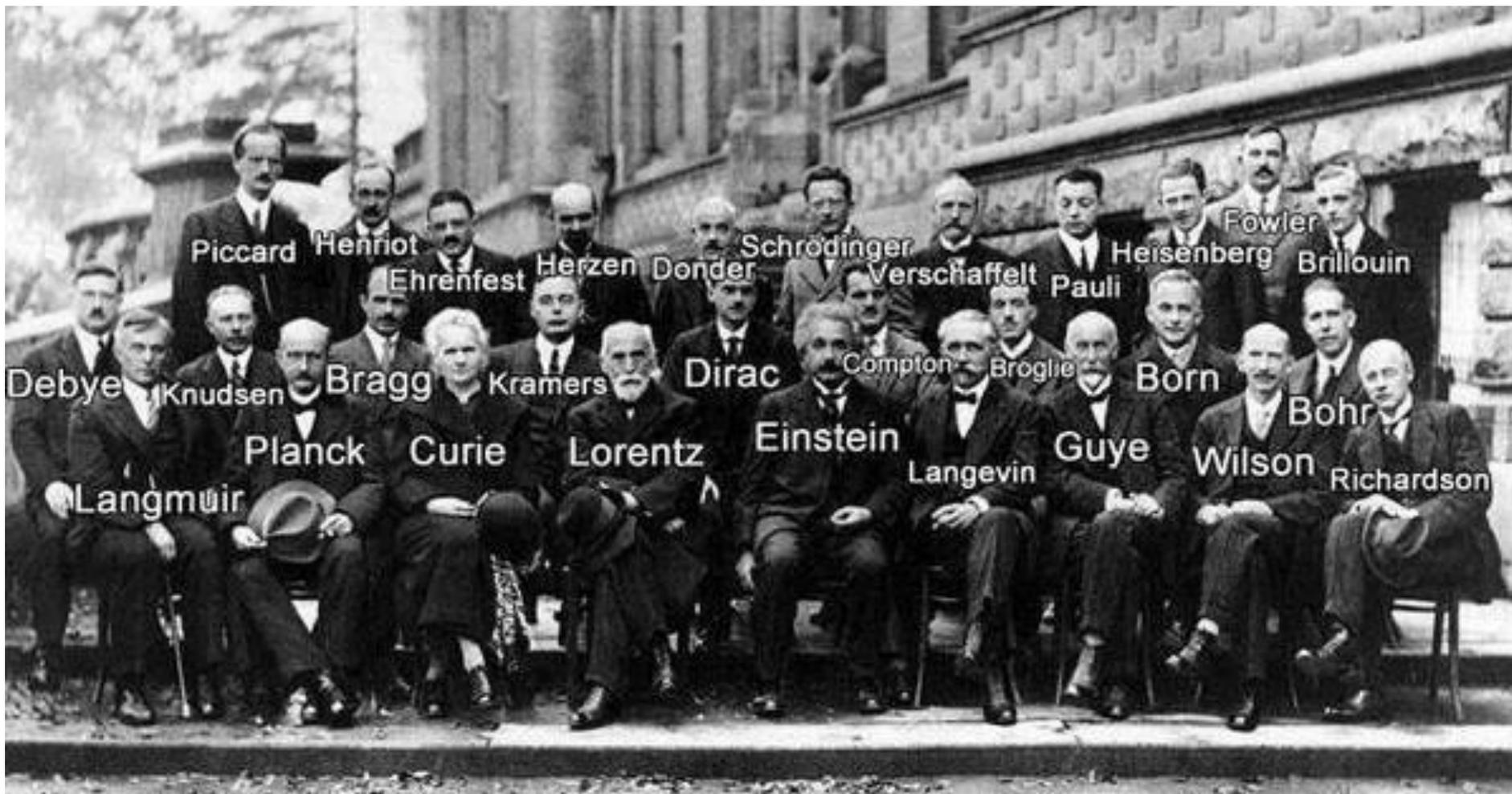


UNIVERSITY OF JYVÄSKYLÄ
Sebastian Lopienski - thematic
CSC 2018



It's a small world

All top scientists knows each other very well



tCSC 2017 (*Split, Croatia*)



Welcome to...

Andreas Alexopoulos, U.Thessaly, Greece

Fabrizio Alfonsi, U.Bologna, Italy

Luca Ambroz, University of Oxford, UK

Francesco Antoniazzi, INFN CNAF, Italy

Tom Byrne, STFC, UK

Julio Calvo Pinto, CERN

Diego Davila Foyo, CERN

Victor Jose Garcia Fernandez, CERN

Jochen Gemmler, KIT, Germany

Jan-Paul Hucka, T.U. Darmstadt, Germany

Jan Kapała, AGH, Poland

Stanko Kruzic, FESB U. Split, Croatia

Dominik Kulikowski, CERN

Alexander Melzer, U. Bonn, Germany

Andrea Merli, UNIMIA and INFN, Italy

Felix Metzner, KIT, Germany

Simone Mosciatti, CERN

Konstantin Pugachev, Budker Inst., Russia

Alexander Ruede, ErnstAbbeHS, Germany

Nicolas Scharmberg, U.Manchester, UK

Marcel Andre Schneider, CERN

Toni Sculac, FESB U.Split, Croatia

Antoni Shtipliyski, I.C.London, UK

Ralf Von Cube, RWTH Aachen, Germany

Vadim Wagner, T.U. Darmstadt, Germany

Zehua Xu, Tsinghua University, China

Darko Zarić, FESB U.Split, Croatia

Miha Zgubic, University of Oxford, UK

Introducing the CSC organisers

- **Joelma Tolomeo**
 - CSC administrative manager (+41 75 411 40 86)



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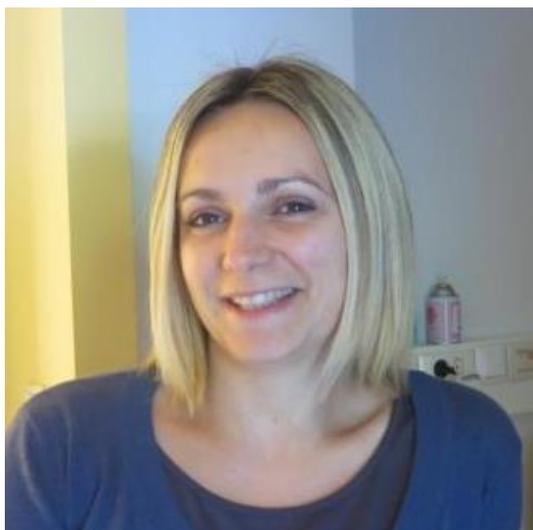
Local tCSC organizing committee

FESB, University of Split

- **Ivica Puljak** - chairperson
- **Nikola Godinović**
- **Damir Lelas**
- **Toni Šćulac**

Local tCSC organizing committee

MEDILS (Mediterranean Institute for Life Sciences)



Irena



Lilina

School rules

School rule #1

Participate

- Attendance at all lectures and exercises is mandatory
- You should attend all meals and coffee breaks
- Taking part in social and sports events is **optional**
 - You must let us know whether you participate or not

School rule #2

Be on time

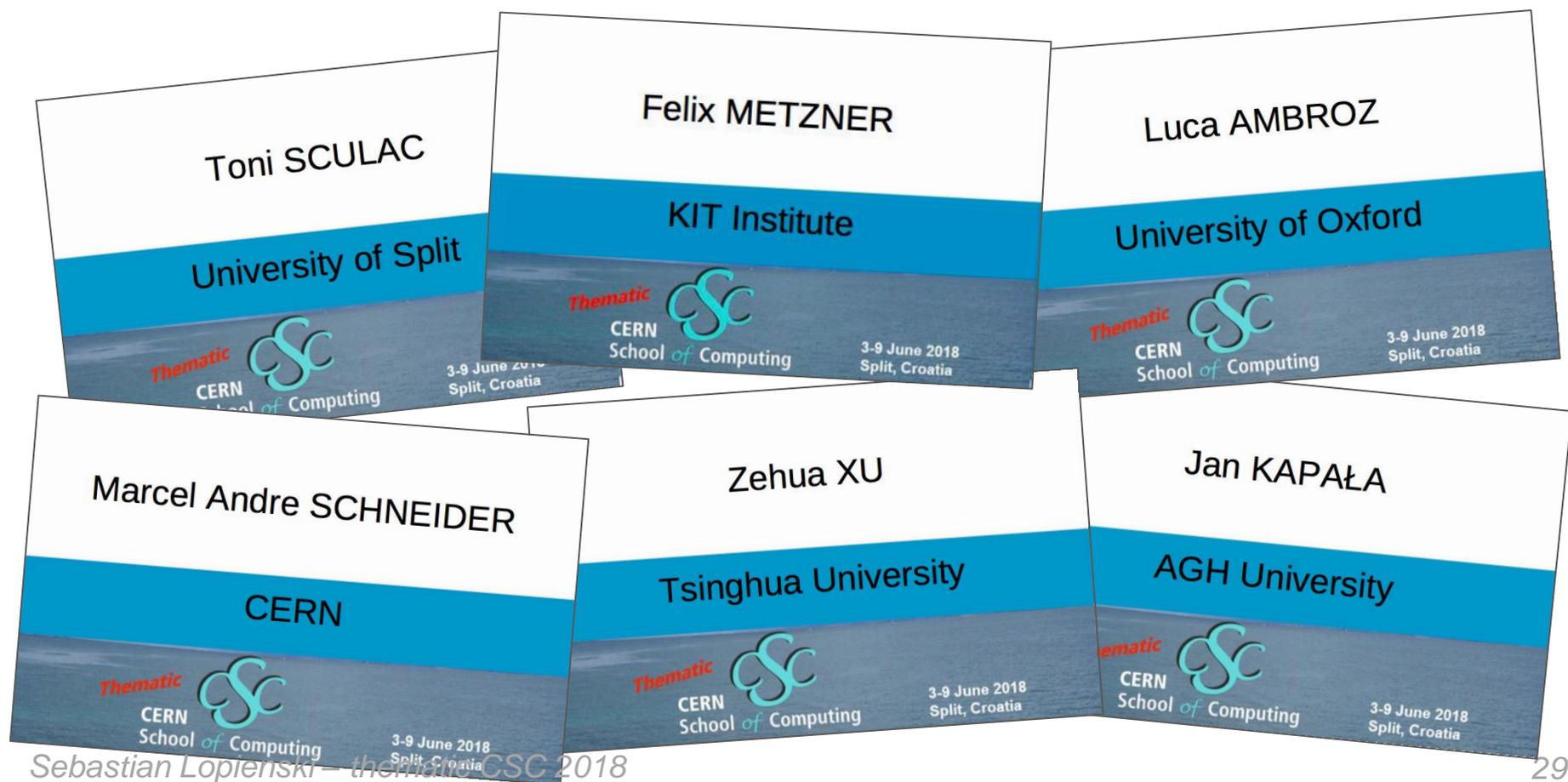
Check what the schedule says:

- *“Lecture starts at 9:00”* => You must be in the room before 9:00
- *“The bus leaves at 18:00”* => It will leave at 18:00

If you're late, we won't wait

School rule #3

Wear your badge



School rule #4

**ENJOY AND PROFIT
FROM THE SCHOOL!**

Sunday evening visit to Split

- 18:00 transport to Split
(meeting at **MEDILS** reception)
- 18:15-20:00 guided visit to Split old town
- 20:15-22:30 **Opening Dinner** in
Para di Soto
- around 22:30 transport back
to MEDILS
- More details on [CSC Live](#)



