Welcome to tCSC 2019

High Throughput Distributed Processing of Future HEP Data

12-18 May 2019
Split, Croatia
tCSC 2019 Opening Ceremony
Sunday May 12, 15:30

“Welcome to University of Split and FESB”
by prof. Dragan Ljutic, 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 Łopiński, CERN, CSC director
Introduction to the School

Sebastian Łopieński, CSC director
Detecting particles (experiments)

Accelerating beams (accelerators)

Large-scale computing (analysis)

CERN’s mission

CERN
uniting people

Innovation

Education

Research

We are here

Discovery

Sebastian Lopienski – thematic CSC 2019
CERN’s three main schools

CERN Accelerator School (CAS)

CERN School of Physics

CERN School of Computing (CSC)
A school with a long history

• The school was created in 1970
  – 42\textsuperscript{nd} edition in 2019

• 2800 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 22 countries
  – http://cern.ch/CSC/past-schools
  – recent: Israel, Spain, Belgium, Greece, Portugal, Cyprus
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

<table>
<thead>
<tr>
<th>iCSC 2019</th>
<th>tCSC 2019</th>
<th>CSC 2019</th>
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<tbody>
<tr>
<td>Inverted school</td>
<td>Thematic school</td>
<td>Main school</td>
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<td>CERN</td>
<td>MEDILS</td>
<td>Babeș-Bolyai University</td>
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We are here
7th 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
7th Thematic CSC – programme

https://indico.cern.ch/event/771113/page/15251-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?
21 participants

https://indico.cern.ch/event/771113/page/15257-participants

• 12 different nationalities
• 16 different institutes from 9 countries

• 4 BSc, 3 MSc students, 2 MSc, 8 PhD students, 4 PhD
• 50%-50% computer science vs. physics

• 2 students from previous main CSC students (2013, 2000)
• 1 local students from FESB, University of Split

• Diverse, talented, passionate for science and technology
It’s a small world
All top scientists knows each other very well
One of the previous tCSC
Introducing the CSC organisers

- **Joelma Tolomeo**
  - CSC administrative manager (+41 75 411 40 86)
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- **Nikos Kasioumis**
  - CSC technical manager (+41 75 411 81 70)
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  – Chair of the CSC Advisory Committee (+385 91 5389 040)
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  – Chair of the CSC Advisory Committee (+385 91 5389 040)

• Sebastian Lopienski
  – CSC director (+41 75 411 20 03)
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

Nikolai Hartmann
Ludwig University

Yujiang Bi
IHEP

Natasha Khan
CERN

Nis Meinert
Rostock University

Ivan Furic
University of Florida

Andrea Sciabà
CERN
School rule #4

ENJOY AND PROFIT FROM THE SCHOOL!
Tonight

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Split
Rain

CERN School of Computing
Tonight

- Walking tour of Split city – CANCELLED
  - We will try to have it later during the week (Friday?)
- **18:00** lecture by Sebastien Ponce
  - but tomorrow we start at 10:00 instead of 9:00!
- **19:45** buses from MEDILS to Split
- **20:00** dinner in restaurant *Konoba Fetivi*
  - meat and fish
- **22:00** buses back to MEDILS

- More details on [CSC Live](#)