iCSC CERN School of Computing

http://indico.cern.ch/e/iCSC-2018

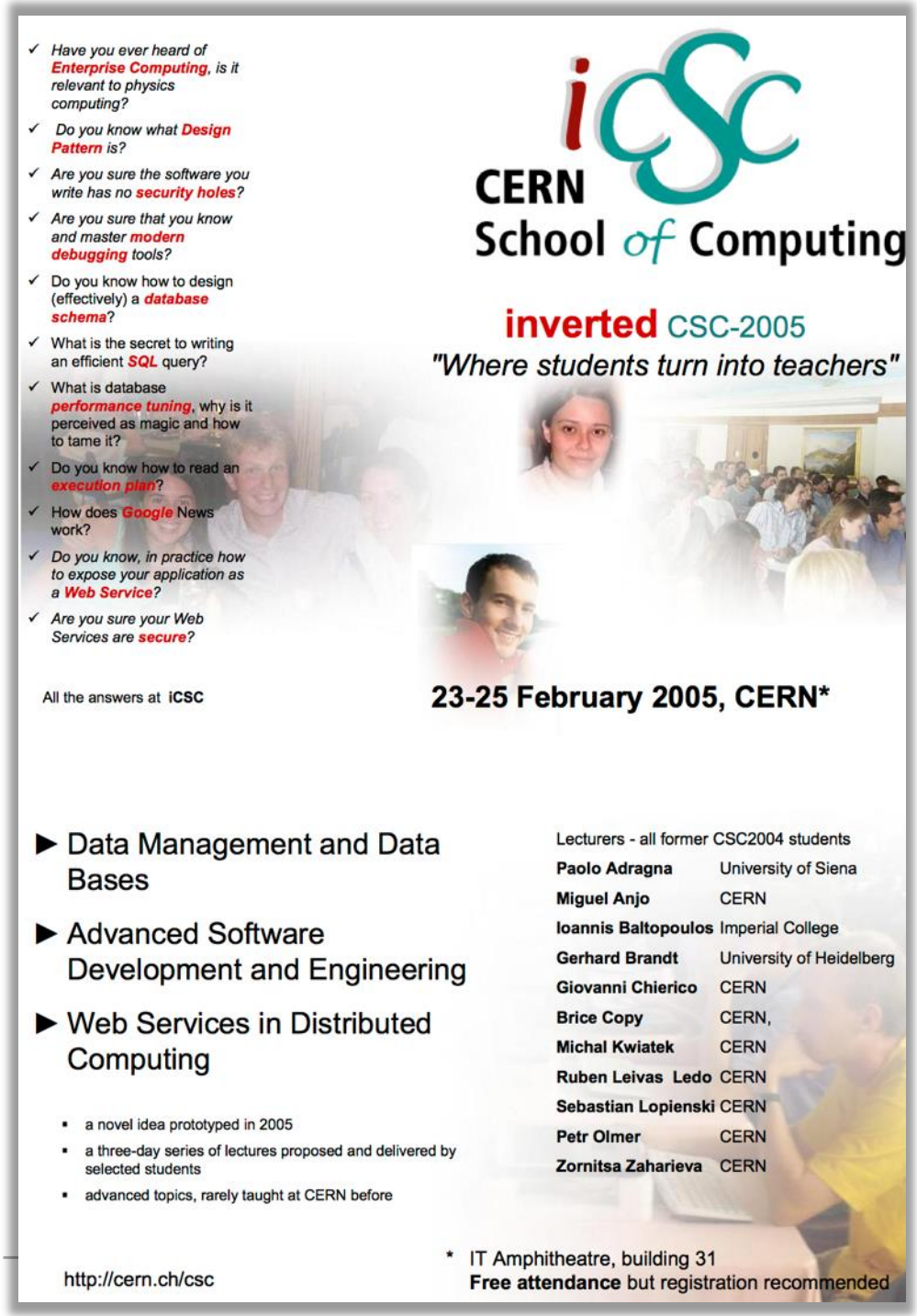
Sebastian Lopienski

CERN School of Computing director

All good things come to an end…

iCSC
CERN
School of Computing 2018

Back in 2005…



"Where students turn into teachers"

Inverted CSC 2018

We encouraged lecturers to propose hands-on exercises

Received 13 proposals of lectures and exercises
for a total of 43 (25+18) hours by students from:

- CSC 2017 *(Madrid, Spain)*
- tCSC 2017 *(Split, Croatia)*
- CSC 2015 *(Kavala, Greece)*

9 proposals retained – 20 (13+7) hours

Inverted Schools

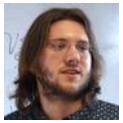
1.	iCSC **2005**:	3 days	11 lecturers	16 hours
2.	iCSC **2006**:	2.5 days	6 lecturers	12 hours
3.	iCSC **2008**:	2.5 days	5 lecturers	12 hours
4.	iCSC **2010**:	1.5 days	7 lecturers	8 hours
5.	iCSC **2011**:	1.5 days	6 lecturers	6 hours
6.	iCSC **2013**:	1.5 days	4 lecturers	7 hours
7.	iCSC **2014**:	1.5 days	5 lecturers	9 hours
8.	iCSC **2015**:	2 days	5 lecturers	10 hours
9.	iCSC **2016**:	3 days	10 lecturers	16 hours
10.	iCSC **2017**:	2.5 days	6 lecturers	12 hours
11.	iCSC **2018**:	3.5 days	8 lecturers	19 hours

Academic topics

(iCSC is not a conference!)

Backend Systems

Blockchain and Decentralized Consensus


Complexity and Data Structures

Bayesian Data Analysis

Identity Federation

Medical Imaging

Parallel Programming with OpenMP

Parallel Programming Patterns

Schedule

https://indico.cern.ch/event/671879/timetable/

Monday, 5 March 2018	Tuesday, 6 March 2018	Wednesday, 7 March 2018	Thursday, 8 March 2018
	08:30 **Welcome coffee**	08:30 **Welcome coffee**	
	09:00 **Bayesian Data Analysis (lecture 1)** - Christian Graf	09:00 **Computing for Decentralized Systems (lecture 1)** - Alejandro Avilés	09:00 **Computing for Decentralized Systems (lecture 2)** - Alejandro Avilés
	10:00 **Algorithms and Data Structures (lecture 2)** - Lennaert Bel	10:00 **K.I.S.S. Parallel Coding (lecture 1)** - Gabriele Gaetano Fronze'	10:00 **Coffee**
	11:00 **Coffee**	11:00 **Coffee**	10:30 **K.I.S.S. Parallel Coding (exercise 1)** - Gabriele Gaetano Fronze'
	11:30 **Speeding up image reconstruction in computed tomography** - Victoria Tokareva	11:30 **From sequential to parallel programming with patterns** - Placido Fernandez Declara	11:30 **K.I.S.S. Parallel Coding (exercise 2)** - Gabriele Gaetano Fronze'
	12:30 **Lunch break**	12:30 **Lunch break**	12:30 **Lunch break**
13:15 **Welcome coffee**	14:00 **Bayesian Data Analysis (lecture 2)** - Christian Graf	14:00 **CERN Data Centre visit**	14:00 **Computing for Decentralized Systems (exercise 1)** - Alejandro Avilés
13:45 **A word from the IT Department Head**			
13:50 **Introduction to the Inverted CSC**			
14:00 **Algorithms and Data Structures (lecture 1)** - Lennaert Bel	15:00 **Securing Distributed Research** - Hannah Short	15:00 **Coffee**	15:00 **Coffee**
15:00 **Modern Backend Systems** - Georgios Voulgarakis		15:30 **Algorithms and Data Structures (exercise 1)** - Lennaert Bel	15:30 **K.I.S.S. Parallel Coding (lecture 2)** - Gabriele Gaetano Fronze'
16:00 **Coffee**	16:00 **Coffee**		16:30 **Closing remarks**
16:30 **Modern Backend Systems (exercise)** - Georgios Voulgarakis	16:30 **Securing Distributed Research (exercise)** - Hannah Short	16:30 **Algorithms and Data Structures (exercise 2)** - Lennaert Bel	

14:00	CERN Dat

#	Name	I want to take part in this visit
1	A	Yes
2	A	Yes
3	B	Yes
4	C	Yes
5	C	Yes
6	D	Yes
7	Ef	
8	El	
9	Er	
10	Fi	
11	G	
12	G	Yes
13	H	Yes
14	Ib	Yes
15	Jo	Yes
16	Jo	Yes
17	Jo	Yes
18	Ju	Yes
19	Lo	Yes
26	Se	Yes
27	Se	Yes
28	Th	Yes
29	U	Yes
30	V	Yes
31	Xa	Yes
32	Yv	Yes

Guess how many people came for 14:20 ...?

Start time:
If your first name starts with letter A to I - come at 14:00
If your first name starts with letter J to Z - come at 14:20
(let's see how many people will get this wrong :-)

A record attendance

- 194 registrations from ~90 institutes in 30 countries
  - 164 with …@cern.ch e-mail addresses; 29 with others
  - 20% females
  - IT department (44 people), BE department (36), CMS (24), ATLAS (14)
- 60 people at the opening (+ ~25 by webcast)
  - 30-60 people for each lecture
- Some people travelled to Geneva (by plane etc.) to attend iCSC!

School opening

”This is how you fish”

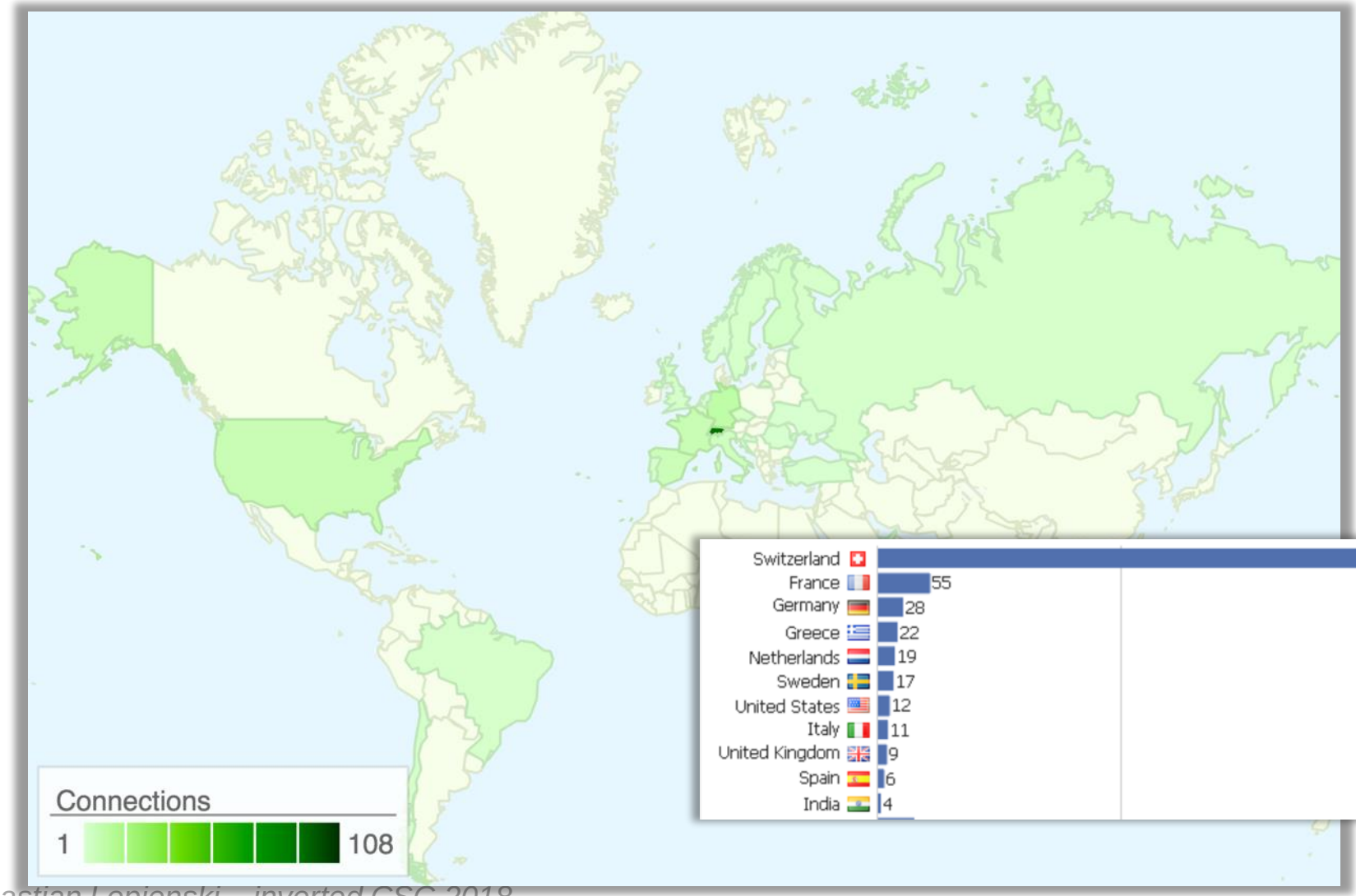
CERN School of Computing

Bitcoin coffee discussions

django
MISP

A global event!

(connections via webcast and to Indico)



iCSC booklet

Still 1 copy left… anyone?
BTW, do you find paper booklets useful?

CERN
School of Computing 2018

Three CERN Schools of Computing

CSC 2018

Main school

1 Oct - 14 Oct 2018

Tel Aviv University | Tel Aviv | Israel

Applications will open in March 2018

tCSC 2018

Thematic school

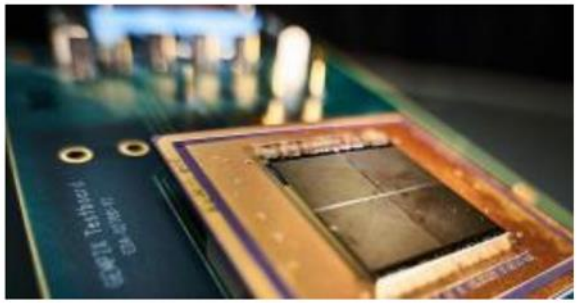
3 Jun - 9 Jun 2018

MEDILS | Split | Croatia

School Website

APPLY NOW!

iCSC 2018



Inverted school

5 Mar - 8 Mar 2018

CERN | Geneva | Switzerland

School Website

register

Deadline for Application : 11 March 2018
www.cern.ch/csc

http://indico.cern.ch/e/tCSC-2018

Lectures and exercises

CERN School of Computing

Social events

Sport afternoon

tCSC 2017 participants

Applications to Thematic CSC 2018
open until this Sunday March 11
at http://indico.cern.ch/e/tCSC-2018

HELP US SPREAD THE WORD!

APPLY!

Deadline for Application : 11 March 2018
www.cern.ch/csc

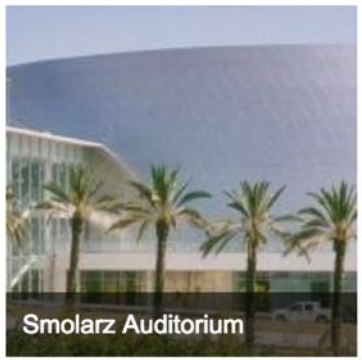
http://indico.cern.ch/e/tCSC-2018

CERN

TEL AVIV UNIVERSITY

Deadline for Application : 6 May 2018
http://cern.ch/csc

Tel Aviv University (TAU)

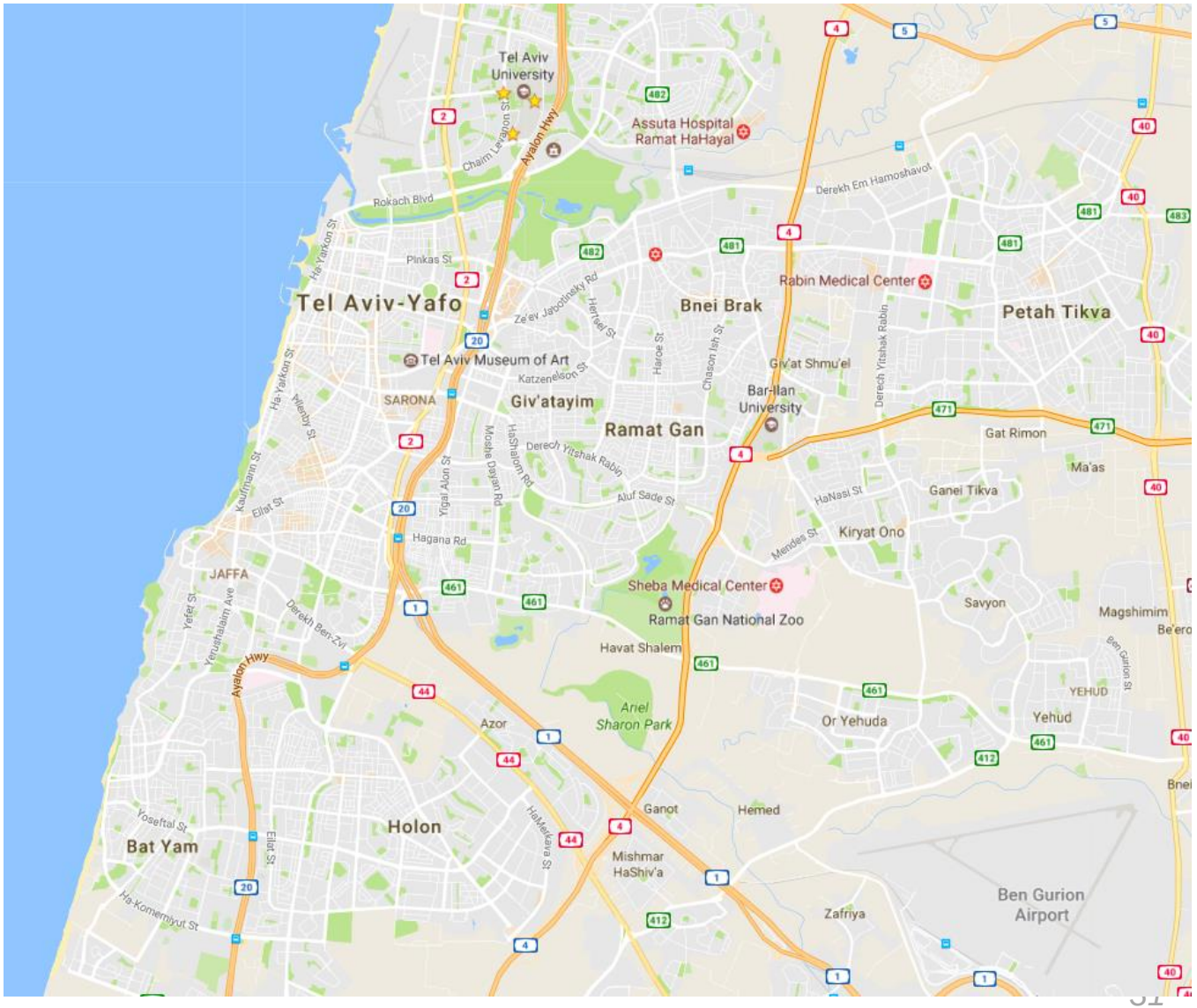


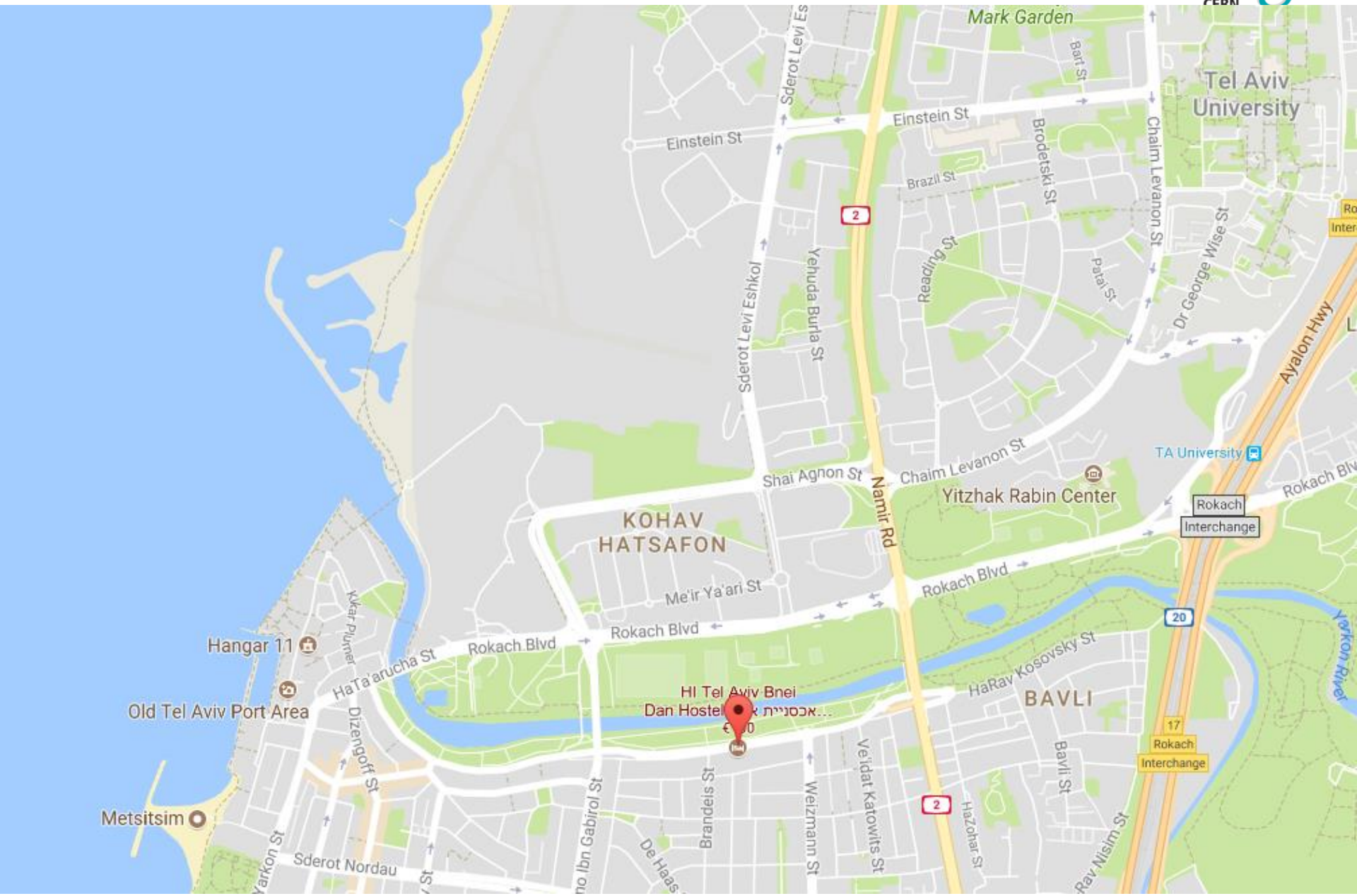
- largest in Israel: 30’000 students
- various faculties: engineering, arts, law, life sciences, exact sciences, social sciences, humanities, music, medicine, business administration etc.)
- rich and modern campus (museums, galleries, sports etc.)

TEL AVIV UNIVERSITY

CERN School of Computing

Israel




Mark Garden
Tel Aviv University
Einstein St
Brazil St
Sderot Levi Eshkol
Yehuda Burla St
Reading St
Brodetski St
Chaim Levanon St
Dr George Wise St
Ayalon Hwy
Shai Agnon St
Namir Rd
Yitzhak Rabin Center
TA University
Rokach Interchange
KOHAV HATSAFON
Me'ir Ya'ari St
Rokach Blvd
HaRav Kosovsky St
BAVLI
Hangar 11
Old Tel Aviv Port Area
HaTa'arucha St
Dizengoff St
HI Tel Aviv Bnei Dan Hostel
Metsitsim
Sderot Nordau
Brandeis St
Weizmann St
Ve'idat Katowits St
Bavli St
HaZohar St
Yarkon River

Applications to CSC 2018 open very soon at http://cern.ch/csc

HELP US SPREAD THE WORD!

APPLY!

CERN

TEL AVIV UNIVERSITY

Deadline for Application : 6 May 2018
http://cern.ch/csc

2018

Thanks to…

Lecturers

https://indico.cern.ch/event/671879/page/11702-speakers

Alejandro Avilés
Bity SA (Switzerland)

Lennaert Bel
Nikhef (Netherlands)

Plácido Fernández
CERN, and University Carlos III of Madrid (Spain)

Gabriele Fronzé
INFN Torino (IT), Subatech Nantes (FR)

Christian Graf
Max Planck Institute (Germany)

Hannah Short
CERN

Victoria Tokareva
JINR (Russia)

Georgios Voulgarakis
CERN

Conveners (session chairs)

Julio Calvo

Daniel Campora

Stefan Chitic

Michael Davis

Eva Hansen

Miguel Hermo

Benedikt Wurkner

Mentors (providing advice&feedback to lecturers)

Danilo Piparo

Nikos Kasioumis

Sebastian Lopienski

Alberto Pace

Sebastien Ponce

Are Strandlie

Enric Tejedor

Ivica Puljak

CSC Organizers

Joelma Tolomeo
(CSC Administrative Manager)

Nikos Kasioumis
(CSC Technical Manager)

Thank you all for attending the School!

CERN