



The Abdus Salam
**International Centre
for Theoretical Physics**



IAEA
International Atomic Energy Agency

WELCOME to the

**Joint ICTP-IAEA School on FPGA-based SoC and its
Applications for Nuclear and Related Instrumentation**

25 Jan - 19 Feb, 2021

ICTP Organizers

Andres Cicuttin

Maria Liz Crespo

IAEA Organizers

Mladen Bogovac

Francois Foulon



SCHOOL PROGRAMME

Monday, 25 January 2021

11:00 - 13:30

Session 1

Chair: Maria Liz CRESPO (ICTP)

The time zone is CET.

You can choose your time zone (in place of of Europe/Rome) on the top right of the page and the programme time will be modified accordingly.

11:00 **Welcome to the School 30'**

Speaker: Mladen BOGOVAC (IAEA, Austria), Francois FOULON (IAEA, Austria), Andres CICUTTIN (ICTP), Maria Liz CRESPO (ICTP)

11:30 **School Outline 30'**

Speaker: Maria Liz CRESPO (ICTP)

12:00 **Brief introduction from participants 30'**

12:30 **FPGA and System on Programmable Chip Technology 1h0'**

Speaker: Cristian SISTERNA (University of San Juan, Argentina)



SCHOOL PROGRAMME

- Detailed schedule can be consulted at the school website:

<http://indico.ictp.it/event/9443/other-view?view=ictp timetable>

- Typical daily timetable (CET time zone):

Timetable	
11:00 - 13:00	Lectures
13:00 - 14:00	break
14:00 - 17:00	Lectures / Lab activities

- School's email (secretariat): smr3562@ictp.it

PARTICIPANTS

- Requests for participation: > 200 applicants from 48 different countries
- Selected: 28 participants from 22 different countries

India

Malaysia

Benin

Iran

Argentina

Guatemala

Argentina/Germany

Indonesia/Japan

Nepal

Pakistan

Russia

Venezuela/Italy

Sudan

Iraq/Malaysia

Cameroon/France

Macedonia/Slovenia

Nigeria

Cuba

Colombia

Cameroon

Indonesia

Sri Lanka



FACULTY

Lecturers

BAZARGAN SABET Pirouz	France
BEN ABDELOUAHED Haifa	Austria
DONDO GAZZANO Julio	Argentina
DUPONT DE DINECHIN Florent	France
KONOROV Igor	Germany
LEVORATO Stefano	Italy
MAGHELLA SEMINARIO Antonio	Austria
MELO Rodrigo	Argentina
RINCON CALLE Fernando	Spain
RONGEN Heinz	Germany
SISTERNA Cristian	Argentina
TESSAROTTO Fulvio	Italy



FACULTY

Lab Tutors

FLORIAN SAMAYOA Werner	Italy / Guatemala
GARCIA ORDONEZ Luis	Italy / Guatemala
JOVALEKIC Nikola	Austria
MOLINA Romina	Italy / Argentina
RAJOVIC Vladimir	Serbia
VALINOTI Bruno	Italy / Argentina



First Week: Lectures

	25-Jan Mon		26-Jan Tue
11:00 - 12:30	Opening	11:00 - 12:40	P. Bazargan
12:30 - 13:30	C. Sisterna	12:40 - 13:10	Q&A
14:30 - 15:30	C. Sisterna	14:10 - 16:10	C. Sisterna
15:30 - 16:00	Q&A	16:10 - 16:30	Q&A
	27-Jan Wen	28-Jan Thu	29-Jan Fri
10:50 - 11:40	F. Tessarotto	R. Melo	F. De Dinechin
11:40 - 12:30	S. Levorato		
12:30 - 13:00	Q&A	Q&A	Q&A
13:50 - 15:30	I. Konorov	F. Rincon Calle	C. Sisterna
15:30 - 16:00	Q&A	Q&A	Q&A

16:00 Salam Distinguished Lectures 2021 (27-29 Jan)

<http://indico.ictp.it/event/9500/>

Second Week: Lab activities

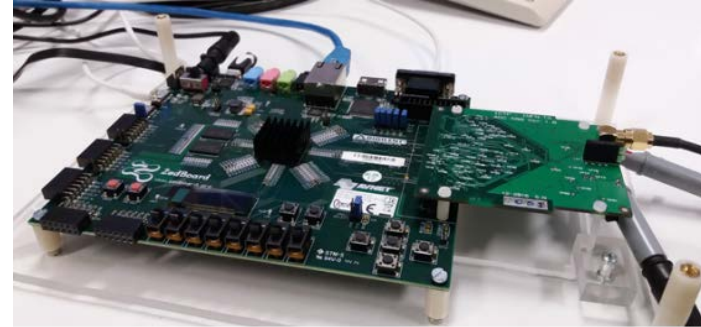
11:00 - 13:00	Lectures
13:00 - 14:00	break
14:00 - 17:00	Lab activities

- **Lab activities:**

Vivado IDE 2019.1

Zynq-7 family SoC

ZedBoard development kit



- **GitLab link (guides for lab activities):**

<https://gitlab.com/smr3562/labs/-/wikis/home>



Third and Fourth Weeks: Project Activities

11:00 - 13:00	Lectures
13:00 - 14:00	break
14:00 - 17:00	Project activities

Parallel Sessions

- **IAEA Project:**

Data Acquisition System for Radiotracer Techniques in Industrial Applications and Environmental Monitoring

- **ICTP Project:**

Digital Pulse Processor based on SoC-FPGA for Particle Detectors

Recommendations:

- 1) Be on time
- 2) Attend at least 90% of the lectures + labs to receive the Diploma
- 3) Feel free to ask questions!



WHAT ABOUT YOU?

NAME

COUNTRY

ORGANIZATION

INTEREST IN THE SCHOOL