**Session Program**

**12-26 May 2019**



# 5th Summer School on INtelligent signal processing for FrontIEr Research and Industry

# *LAB SESSION*

Huazhong University of Science and Technology in Wuhan, China

# Monday 13 May

**13:30**

## LAB SESSION: PRESENTATION OF THE LABS BY THE LAB ORGANIZERS IN A PLENARY SESSION
Session  | **Location:** Huazhong University of Science and Technology in Wuhan, China

**13:30–13:39**  **INTRODUCTION TO THE LABS SESSION**

**Speakers**
Prof. Aurore SAVOY NAVARRO, Prof. Nicola D'ASCENZO

**13:39–13:48**

**FE1 FRONT-END ELECTRONICS ON DEEP SUB- MICRON CMOS TECHNOLOGY FOR THE NEXT GENERATION OF PIXEL BASED DETECTORS**

**Speaker**
Prof. Lodovico RATTI

**13:57–14:06**  **FE2 INTRODUCTION TO FDSOI PIXEL DETECTORS**

**Speaker**
Prof. Yoshinobu UNNO

**14:06–14:15**  **FE3 NEW SENSORS CHARACTERIZATION**

**Speaker**
Dr Sven WONSAK

**14:15–14:24**

**FE4 2.5D AND 3D TECHNOLOGY: INTRODUCTION TO 3D INTERCONNECT TECHNOLOGY DESIGN**

**Speaker**
Dr Robert PATTI

**14:24–14:33**  **FE5 STATIC SIPM CHARACTERIZATION**

**Speaker**
Mr Lin WANG

**14:33–14:42**  **FE6 MULTI VOLTAGE THRESHOLD LAB**

**Speaker**
Dr Daoming XI

**14:42–14:51**

**ASTRO1 DETECTION LAB: CHARACTERIZATION OF A CCD DETECTOR (ASTROPHYSICS)**

**Speaker**
Dr Jean Gabriel CUBY

**14:51–15:00**  **ASTRO2 INTRODUCTION TO DARK MATTER DETECTION**

**Speaker**
Dr Charling TAO

**15:00–15:09**  **ASTRO3 USE OF SIPM IN ASTROPHYSICS EXPERIMENTS**

**Speakers**

Dr Daniel Alberto GUBERMAN, Prof. Riccardo PAOLETTI

### 15:09–15:18

### HEP1 ELECTRON BEAM TOMOGRAPHY OF A BASIC ELEMENT OF THE HIGH GRANULARITY CALORIMETRY FOR HL-LHC (CMS)

**Speakers**

Dr David BARNEY, Mr Thorben QUAST

### 15:18–15:27   MED1 NEMA MEASUREMENT OF PET SENSITIVITY

**Speaker**

Mr Bo ZHANG

### 15:27–15:36   MED2 SMALL ANIMAL PET MOUSE ACQUISITION

**Speaker**

Dr Wenchang XIAO

### 15:45–15:54   CL1 INTRODUCTION TO INTEL FPGA BASED LAB

**Speaker**

Mr Zhaojun ZHU

### 15:54–16:03   CL2 MASSIVE PARALLEL COMPUTING (SESSION 1)

**Speakers**

Mr Jefferson FIALHO COELHO, Prof. Liria SATO, Dr Rogerio IOPE

### 16:03–16:12   CL3 MASSIVE PARALLEL COMPUTING (SESSION 2)

**Speakers**

Dr Rogerio LOPE, et al.

### 16:12–16:21

### CL4 MACHINE LEARNING & DEEP LEARNING APPLIED TO ASTROPHYSICS

**Speaker**

Dr Lara LLORET IGLESIAS

### 16:21–16:30   CL5 DEEP LEARNING WITH KERAS I

**Speakers**

Dr Lisa BENATO, et al.

### 16:30–16:39   CL6 DEEP LEARNING WITH KERAS II

**Speakers**

Dr Lisa BENATO, et al.

### 16:39–16:48   CL7 INTRODUCTION TO NEW FPGAS SOFTWARE PLATFORM

**Speakers**

Mr Ciro CEISSLER, Prof. Guido ARAUJO, Mr Ramon NEPOMUCENO

### 16:48–16:57   CL8 INTRODUCTION TO GPU COMPUTING SESSION 1

**Speaker**

Dr Dorothea VOM BRUCH

### 16:57–17:05   CL9 INTRODUCTION TO GPU COMPUTING SESSION 2

**Speaker**

Dr Dorothea VOM BRUCH

17:05–17:13

**CL10 BEHIND A PUBLISHED PAPER - FROM BENCH TO MEDICAL COMMUNITY**

**Speaker**

Dr Alba DI PARDO

17:13–17:22 **CL11 LAB ON COMPUTATIONAL SPECTRAL VIDEO IMAGING**

**Speaker**

Prof. Xun CAO

17:22–17:30 **ASTRO4: Observational Laboratory**

**Speaker**

17:42

Dr Jean Gabriel CUBY

# Tuesday 14 May

14:00

17:00

**LAB SESSION: Session 1**

**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Wednesday 15 May

14:00

17:00

**LAB SESSION: Session 2**

**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Thursday 16 May

14:00
|
17:00

**LAB SESSION: Session 3**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Friday 17 May

14:00

17:00

**LAB SESSION: Session 4**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Saturday 18 May

14:00
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17:00

**LAB SESSION: Session 5**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Monday 20 May

14:00
|
17:00

**LAB SESSION: Session 6**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Tuesday 21 May

12:30
|
15:30

**LAB SESSION: Session 7**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Wednesday 22 May

14:00

17:00

**LAB SESSION: Session 8**

**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Thursday 23 May

14:00

17:00

**LAB SESSION: Session 9**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China

# Friday 24 May

14:00
|
17:00

**LAB SESSION: Session10**
**Session** | **Location:** Huazhong University of Science and Technology in Wuhan, China