

STREAM Final Conference and Hackathon

Report of Contributions

Contribution ID: 1

Type: **not specified**

Design and characterisation of radiation-hard monolithic sensors in TowerJazz 180 nm CMOS

Monday, 16 September 2019 16:00 (25 minutes)

Presenter: BERDALOVIC, Ivan (CERN)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 2

Type: **not specified**

Characterization of depleted monolithic active pixel sensors with a column-drain read-out architecture in CMOS technologies

Tuesday, 17 September 2019 09:00 (25 minutes)

Presenter: CAICEDO SIERRA, Ivan Dario (University of Bonn (DE))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 3

Type: **not specified**

Pixel Sensor Development for High Radiation Environments in Modern CMOS Technologies

Monday, 16 September 2019 16:25 (25 minutes)

Presenter: MOUSTAKAS, Konstantinos (University of Bonn (DE))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 4

Type: **not specified**

Effects of program time on Sidewall Spacer data retention with respect to Total Ionizing Dose

Tuesday, 17 September 2019 11:30 (25 minutes)

Presenter: VINCENZI, Tommaso (ams AG)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 5

Type: **not specified**

STREAM Innovative Training Network - Project Summary

Monday, 16 September 2019 09:15 (45 minutes)

Presenter: PERNEGGER, Heinz (CERN)

Contribution ID: 6

Type: **not specified**

Venture capital adventures, start ups and innovation

Monday, 16 September 2019 10:00 (1 hour)

Speaker: Patrick Biro, Venture Kick Program Director

Science has always been a key ingredient to innovate and develop new products. Nevertheless, why so many technologies end up not being transformed into a business? What are the available support for the scientists trying to launch a product? What is the current landscape around Swiss tech innovation?

Contribution ID: 8

Type: **not specified**

Design and characterization in Depleted CMOS technology for particle physics pixel detector

Tuesday, 17 September 2019 09:25 (25 minutes)

Presenters: BHAT, Siddharth (CPPM, Aix-Marseille Universite , CNRS/IN2P3); BHAT, Siddharth (CPPM)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 9

Type: **not specified**

Depleted monolithic CMOS sensors for particle physics pixel detectors at high intensity and high radiation dose

Tuesday, 17 September 2019 09:50 (25 minutes)

Presenters: Mr CHEN, Zongde (CPPM, Aix-Marseille Universite, CNRS/IN2P3); CHEN, Zongde (cppm)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 11

Type: **not specified**

Characterisation of radiation-hard X-ray sensors for medical applications

Tuesday, 17 September 2019 11:05 (25 minutes)

Presenters: SEGMANOVIC, Filip; SEGMANOVIC, Filip (AMS AG)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 12

Type: **not specified**

Assessment, radiation tests and design specifications for a novel CMOS monolithic pixel detector integrated on a transmission electron microscope setup

Tuesday, 17 September 2019 14:30 (35 minutes)

Presenters: FERRETTI, Andrea (FEI); MATEOS, Horacio (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 13

Type: **not specified**

Design and timing characterization of radiation-hard circuits for monolithic sensors

Monday, 16 September 2019 16:50 (25 minutes)

Presenter: PIRO, Francesco (CERN)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 14

Type: **not specified**

Effect of total ionizing dose on CMOS pixel sensors

Tuesday, 17 September 2019 10:40 (25 minutes)

Presenters: SIMON ARGEMI, Lluís (University of Glasgow); SIMON ARGEMI, Lluís (University of Glasgow (GB))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 15

Type: **not specified**

Characterization of high voltage CMOS pixel sensor prototypes

Tuesday, 17 September 2019 11:55 (25 minutes)

Presenter: ZAFFARONI, Ettore (Universite de Geneve (CH))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 16

Type: **not specified**

Advances on integration of Monolithic Silicon Sensors in Pixel Trackers

Tuesday, 17 September 2019 13:40 (25 minutes)

Presenter: CARDELLA, Roberto (CERN)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 17

Type: **not specified**

Identification of New Application Fields for Technologies: Sequential Search Increases the Problem-Solution-Fit

Tuesday, 17 September 2019 15:50 (25 minutes)

Presenter: MEHNER, Barbara

Session Classification: Early Stage Researchers' Presentations

Contribution ID: **18**

Type: **not specified**

Enabling technologies in the humanitarian sector

Tuesday, 17 September 2019 16:15 (25 minutes)

Presenter: MLADENOVSKA, Shtefi (Vienna University of Economics and Business)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 19

Type: **not specified**

Developing a Portable CMOS sensor based Detector System for Alpha Particle Measurement

Tuesday, 17 September 2019 14:05 (25 minutes)

Presenter: Mr WOOD, Callum (CiS Forschungsinstitut für Mikrosensorik GmbH (DE))

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 20

Type: **not specified**

CERN Knowledge Transfer: How I moved into Business Development.

Monday, 16 September 2019 11:00 (1 hour)

Speaker: A. Pezous, Knowledge Transfer, CERN

Contribution ID: 21

Type: **not specified**

High resolution imaging sensors

Monday, 16 September 2019 13:30 (1 hour)

Speakers:

E. Toledano , Etesian and Tower Jazz (Israel)

Prof. Y. Roizin, Univeristy of Tel Aviv and Tower Jazz (Israel)

Contribution ID: 22

Type: **not specified**

Integrated photonics and advanced manufacturing with femtosecond laser

Monday, 16 September 2019 14:30 (1 hour)

Speaker: Prof. G. Jose, University of Leeds (UK)

The presentation will detail a new method developed to produce functional surfaces in glass or semiconductor materials using femtosecond laser produced plasma of certain materials. The ultrafast laser doping will allow to create optically or electrically active layers of materials perhaps other methods can't produce. In particular doping high concentrations of rare earth ions can be achieved in glass, silica on silicon or polymers to produce planar integrated waveguide amplifiers and lasers. By varying dopants and materials surfaces engineering photonic sensing can also be achieved. The talk will also outline the activities for commercialisation of this technology in the sector of consumer electronics, medical devices and wearable devices.

Contribution ID: 23

Type: **not specified**

Oxide Bond Processing and Characterization for Chip-to-Chip Cu-SiO₂ Hybrid Bonding

Tuesday, 17 September 2019 15:05 (25 minutes)

Presenter: FRITZSCH, Thomas (Fraunhofer IZM)

Session Classification: Early Stage Researchers' Presentations

Contribution ID: 26

Type: **not specified**

Hackathon - Technology meets Society -Day#1 (Reserved to the STREAM Early Stage Researchers)

Wednesday, 18 September 2019 09:00 (10 hours)

The Hackathon is organised by Julia Bauer and Lynn Tran Viet.

Program:

Welcome and team building

Reflect on your personal strengths and technological know-how

Define the challenge: What problems do you want to solve together to make the world a better place?

Target group: For whom do you want to solve the problem?

Ideation: Develop ideas how to solve the problem

Hacking: Prototype your idea

Contribution ID: 27

Type: **not specified**

Hackathon Technology meets Society - Day#2 (Reserved to the STREAM Early Stage Researchers)

Thursday, 19 September 2019 09:30 (5h 30m)

The Hackathon is organised by Julia Bauer and Lynn Tran Viet.

Program:

Finalize prototypes

How to pitch your ideas / prototypes

Pitch session

Jury award

Farewell

Contribution ID: 28

Type: **not specified**

STREAM Final Conference Dinner

Monday, 16 September 2019 19:00 (3 hours)

The Dinner will have place at the restaurant La Perle du Lac downtown Geneva (<http://www.laperledulac.ch/>).

Contribution ID: 29

Type: **not specified**

Conference Close-out

Tuesday, 17 September 2019 16:50 (20 minutes)

Presenters: PERNEGGER, Heinz (CERN); CAPEANS GARRIDO, Mar (CERN)