

# **1st MONOLITH Workshop on silicon sensors for timing and their applications**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Simulations + numerical calculations for fast timing sensors**

*Monday 5 September 2022 09:10 (20 minutes)*

**Presenter:** RIEGLER, Werner (CERN)

**Session Classification:** Timing with silicon

Contribution ID: 2

Type: **not specified**

## Welcome —Coffee and croissants

*Monday 5 September 2022 09:00 (10 minutes)*

**Presenter:** IACOBUCCI, Giuseppe (Universite de Geneve (CH))

**Session Classification:** Timing with silicon

Contribution ID: 3

Type: **not specified**

## Timespot project testbeam results and simulations

*Monday 5 September 2022 09:50 (20 minutes)*

**Presenter:** LAI, Adriano (Universita e INFN, Cagliari (IT))

**Session Classification:** Timing with silicon

Contribution ID: 4

Type: **not specified**

## Design of fast CMOS in 65 nm TJ

*Monday 5 September 2022 09:30 (20 minutes)*

**Presenter:** SNOEYS, Walter (CERN)

**Session Classification:** Timing with silicon

Contribution ID: 5

Type: **not specified**

## Discussion

*Monday 5 September 2022 10:10 (40 minutes)*

**Session Classification:** Timing with silicon

Contribution ID: **11**

Type: **not specified**

## **Summary on IHP experience with gain layers**

*Monday 5 September 2022 14:00 (20 minutes)*

**Presenter:** Mr ELVIRETTI, Matteo (IHP microelectronics)

**Session Classification:** Gain layers

Contribution ID: 12

Type: **not specified**

## Gain layer performance degradation after irradiation

*Monday 5 September 2022 14:20 (20 minutes)*

**Presenter:** MOLL, Michael (CERN)

**Session Classification:** Gain layers



Contribution ID: **16**

Type: **not specified**

## **INFN project on fast electronics**

*Monday 5 September 2022 15:30 (20 minutes)*

**Presenter:** RIVETTI, Angelo (INFN - National Institute for Nuclear Physics)

**Session Classification:** Fast electronics

Contribution ID: 17

Type: **not specified**

## Overview talk on HBTs

*Monday 5 September 2022 16:05 (20 minutes)*

**Presenter:** Dr RUECKER, Holger (IHP microelectronics)

**Session Classification:** Fast electronics

Contribution ID: **18**

Type: **not specified**

## **Fast, low noise frontend in SiGe BiCMOS**

*Monday 5 September 2022 16:25 (20 minutes)*

**Presenter:** PAOLOZZI, Lorenzo (CERN)

**Session Classification:** Fast electronics

Contribution ID: **19**

Type: **not specified**

## The FastIC project

*Monday 5 September 2022 16:45 (20 minutes)*

**Presenter:** BALLABRIGA SUNE, Rafael (CERN)

**Session Classification:** Fast electronics

Contribution ID: **20**

Type: **not specified**

## Discussion

*Monday 5 September 2022 17:15 (40 minutes)*

**Session Classification:** Fast electronics

Contribution ID: **21**

Type: **not specified**

## Discussion

*Monday 5 September 2022 14:40 (30 minutes)*

**Session Classification:** Gain layers

Contribution ID: 22

Type: **not specified**

## Development of novel sub-picosecond TDC

*Monday 5 September 2022 17:05 (10 minutes)*

**Presenter:** Dr CARDELLA, Roberto (Universite de Geneve (CH))

**Session Classification:** Fast electronics

Contribution ID: 23

Type: **not specified**

## The PicoPix project

*Monday 5 September 2022 15:10 (20 minutes)*

**Presenter:** LLOPART CUDIE, Xavi (CERN)

**Session Classification:** Fast electronics



Contribution ID: 25

Type: **not specified**

## Overview LGAD technology at FBK

*Monday 5 September 2022 11:25 (20 minutes)*

**Presenter:** PATERNOSTER, Giovanni (Fondazione Bruno Kessler)

**Session Classification:** Timing with silicon

Contribution ID: 26

Type: **not specified**

## AC-coupled LGAD with HPKK technology

*Monday 5 September 2022 11:45 (20 minutes)*

**Presenter:** NAKAMURA, Koji (High Energy Accelerator Research Organization (JP))

**Session Classification:** Timing with silicon

Contribution ID: 27

Type: **not specified**

## **MONOLITH project simulations and testbeam results**

*Monday 5 September 2022 11:05 (20 minutes)*

**Presenter:** MUNKER, Magdalena (University of Geneva)

**Session Classification:** Timing with silicon

Contribution ID: 28

Type: **not specified**

## Discussion

*Monday 5 September 2022 12:05 (40 minutes)*

**Session Classification:** Timing with silicon

Contribution ID: 29

Type: **not specified**

## The NA62 GigaTracker

*Tuesday 6 September 2022 09:00 (20 minutes)*

**Presenter:** PERRIN-TERRIN, Mathieu (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Applications in HEP and space experiments

Contribution ID: 30

Type: **not specified**

## UZH plans for CMS Phase3 and in AIDAInnova

*Tuesday 6 September 2022 09:20 (20 minutes)*

**Presenter:** MACCHIOLO, Anna (University of Zurich (CH))

**Session Classification:** Applications in HEP and space experiments

Contribution ID: 32

Type: **not specified**

## Mu3e silicon timing upgrade

*Tuesday 6 September 2022 09:40 (20 minutes)*

**Presenter:** SCHOENING, Andre (Ruprecht Karls Universitaet Heidelberg (DE))

**Session Classification:** Applications in HEP and space experiments

Contribution ID: 33

Type: **not specified**

## **DUNE cryogenic electronics**

*Tuesday 6 September 2022 10:15 (20 minutes)*

**Presenter:** CHEN, Hucheng (Brookhaven National Laboratory (US))

**Session Classification:** Applications in HEP and space experiments



Contribution ID: **34**

Type: **not specified**

## Discussion

*Tuesday 6 September 2022 10:55 (45 minutes)*

**Session Classification:** Applications in HEP and space experiments

Contribution ID: 36

Type: **not specified**

## EPFL AQUA Lab cryogenic projects

*Tuesday 6 September 2022 14:00 (20 minutes)*

**Presenter:** Prof. CHARBON, Edoardo (EPFL)

**Session Classification:** Cryogenic applications

Contribution ID: 37

Type: **not specified**

## **IHP PDK + models for cryogenic applications**

*Tuesday 6 September 2022 14:20 (20 minutes)*

**Presenters:** Dr DATSUK, Anton (IHP); RUECKER, Holger (IHP microelectronics)

**Session Classification:** Cryogenic applications

Contribution ID: **38**

Type: **not specified**

## **IDQuantique projects**

*Tuesday 6 September 2022 14:40 (20 minutes)*

**Presenter:** Dr BOUSSIÈRES, Félix (IDQuantique)

**Session Classification:** Cryogenic applications

Contribution ID: 39

Type: **not specified**

## Discussion

*Tuesday 6 September 2022 15:00 (40 minutes)*

**Session Classification:** Cryogenic applications

Contribution ID: 40

Type: **not specified**

## **Potential use of combined ToF-tracking sensors for Proton Computer Tomography**

*Tuesday 6 September 2022 10:35 (20 minutes)*

**Presenter:** Prof. SANCHEZ, Federico (Universite de Geneve (CH))

**Session Classification:** Applications in HEP and space experiments