# 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

The FastIC project

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 AlDAInnova

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