

ELMA Workshop on "Energy loss measurements with MAPS"



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and introduction

Presenter: CONTIN, Giacomo (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 2

Type: **not specified**

Perspectives for energy measurement implementation in MAPS design

Wednesday 10 September 2025 14:45 (20 minutes)

Author: BORGHELLO, Giulio (CERN)

Presenters: RIPAMONTI, Giacomo (CERN); BORGHELLO, Giulio (CERN)

Session Classification: Technologies

Contribution ID: 3

Type: **not specified**

X-ray fluorescence measurements in the 1 keV - 43 keV energy range with large-scale 65 nm CMOS sensor prototypes for ALICE ITS3

Wednesday 10 September 2025 16:45 (15 minutes)

Presenter: VECIL, Giovanni (Istituto Nazionale di Fisica Nucleare)

Session Classification: Measurements

Contribution ID: 4

Type: **not specified**

Preliminary look at the energy response of ALICE ITS3 babyMOSS to a mixed ion beam

Wednesday 10 September 2025 17:05 (15 minutes)

Presenter: VILLANI, Anna (Istituto Nazionale di Fisica Nucleare)

Session Classification: Measurements

Contribution ID: 5

Type: **not specified**

On-satellite particle tracking and identification with MAPS sensors

Thursday 11 September 2025 10:50 (20 minutes)

Presenter: RICCI, Ester (Istituto Nazionale di Fisica Nucleare)

Session Classification: Applications

Contribution ID: 6

Type: **not specified**

Energy response of ARCADIA sensors (speaker tba)

Session Classification: Technologies

Contribution ID: 7

Type: **not specified**

PID with ALICE 3 trackers using Time-over-Threshold

Thursday 11 September 2025 12:35 (15 minutes)

Presenter: FRIBERT, Henrik (Technische Universität München - TUM)

Session Classification: Measurements

Contribution ID: 8

Type: **not specified**

Energy response of MAPS designed at C4PI

Wednesday 10 September 2025 15:10 (20 minutes)

Presenter: KACHEL, Maciej (IPHC)

Session Classification: Technologies

Contribution ID: 9

Type: **not specified**

Energy-Sensitive Detectors in X-ray Imaging: Technologies and applications

Thursday 11 September 2025 09:00 (25 minutes)

Presenter: DI TRAPANI, Vittorio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Applications

Contribution ID: **10**

Type: **not specified**

First day wrap-up

Wednesday 10 September 2025 18:10 (20 minutes)

Presenter: CONTIN, Giacomo (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 11

Type: **not specified**

Particle energy loss measurements in Biophysics: needs and perspectives (tbc)

Session Classification: Applications

Contribution ID: 12

Type: **not specified**

Energy response of Monopix sensor series

Wednesday 10 September 2025 15:35 (15 minutes)

Presenter: SCHALL, Lars

Session Classification: Technologies

Contribution ID: 13

Type: **not specified**

Cluster sizes and shapes as proxy for PID with diffusion-dominated MAPS

Presenter: BLIDARU, Bogdan (GSI)

Session Classification: Measurements

Contribution ID: 14

Type: **not specified**

Fragment measurement with MAPS in FOOT (speaker tba)

Session Classification: Applications

Contribution ID: 15

Type: **not specified**

Energy response of the ATLASPIX3 HVCMOS sensor

Wednesday 10 September 2025 17:50 (15 minutes)

Presenter: CERVATO, Beatrice (Istituto Nazionale di Fisica Nucleare)

Session Classification: Applications

Contribution ID: 16

Type: **not specified**

A Time-over-Threshold asynchronous front-end in 28 nm CMOS (tbc)

Session Classification: Applications

Contribution ID: 17

Type: **not specified**

MAPS for space applications (tbc)

Session Classification: Applications

Contribution ID: **18**

Type: **not specified**

The Bergen proton CT project

Thursday 11 September 2025 09:30 (20 minutes)

Presenter: GABOR, Biro (HUN-REN Wigner Research Centre for Physics)

Session Classification: Applications

Contribution ID: **19**

Type: **not specified**

The Monolithic Active Pixel Sensor (MAPS) technology

Wednesday 10 September 2025 14:15 (25 minutes)

Presenters: SULJIC, Miljenko (TS); SULJIC, Miljenko

Session Classification: Technologies

Contribution ID: **20**

Type: **not specified**

Wrap-up discussion

Thursday 11 September 2025 13:00 (30 minutes)

Contribution ID: 21

Type: **not specified**

DUMBO: a 2D imaging beta detector based on ALPIDE chips for radiopharmaceutical applications

Presenter: SERAFINI, Davide (University of Siena & INFN-LNL)

Session Classification: Measurements

Contribution ID: 22

Type: **not specified**

Particle identification with MAPS in ALICE

Thursday 11 September 2025 12:15 (15 minutes)

Presenter: LUCIA, Giorgio Alberto

Session Classification: Measurements

Contribution ID: 23

Type: **not specified**

dE/dx with hybrid pixels in ATLAS

Thursday 11 September 2025 11:55 (15 minutes)

Presenter: RAVERA, Simone (Istituto Nazionale di Fisica Nucleare)

Session Classification: Measurements

Contribution ID: 24

Type: **not specified**

MAPS applications in RGS and Compton Chamber

Thursday 11 September 2025 09:55 (20 minutes)

Presenter: TRILOKI, Triloki (INFN Bari Italy)

Session Classification: Applications

Contribution ID: 25

Type: **not specified**

Energy measurements with MALTA and perspectives

Presenter: BERLEA, Dumitru Vlad

Session Classification: Measurements

Contribution ID: 26

Type: **not specified**

The ARCADIA Depleted Monolithic Active Pixel: X-ray characterization and industrial applications

Thursday 11 September 2025 11:35 (20 minutes)

Presenter: CIARLANTINI, Sabrina (Istituto Nazionale di Fisica Nucleare)

Session Classification: Applications

Contribution ID: 27

Type: **not specified**

Welcome - from the Director of the Physics Department

Wednesday 10 September 2025 14:00 (5 minutes)

Presenter: DELLA RICCA, Giuseppe (Istituto Nazionale di Fisica Nucleare)

Session Classification: Welcome and introduction

Contribution ID: 28

Type: **not specified**

Welcome - from the Director of INFN Trieste

Wednesday 10 September 2025 14:05 (5 minutes)

Presenter: BONVICINI, Valter (Istituto Nazionale di Fisica Nucleare)

Session Classification: Welcome and introduction

Contribution ID: 29

Type: **not specified**

Introduction to the Workshop

Wednesday 10 September 2025 14:10 (5 minutes)

Presenter: CONTIN, Giacomo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Welcome and introduction

Contribution ID: 30

Type: **not specified**

AstroPix: monolithic active pixel sensors for space based applications and collider experiments

Thursday 11 September 2025 11:15 (15 minutes)

Presenter: DRIUTTI, Anna

Session Classification: Applications

Contribution ID: 31

Type: **not specified**

Perspectives for energy measurements with MALTA

Wednesday 10 September 2025 15:55 (15 minutes)

Presenter: BERLEA, Dumitru Vlad

Session Classification: Technologies

Contribution ID: 32

Type: **not specified**

DUMBO: a 2D imaging beta detector based on ALPIDE chips for radiopharmaceutical applications

Wednesday 10 September 2025 17:25 (20 minutes)

Presenter: SERAFINI, Davide (University of Siena & INFN-LNL)

Session Classification: Applications