

Session Program

16-21 Nov 2025



The 14th international "Hiroshima" Symposium on the Development and Application of Semiconductor Tracking Detectors (HSTD 14)

ALL Poster

Academia Sinica, 2F, Activities Center
128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

Sunday 16 November

08:40

ALL Poster: #1-#30

Session |

Location: Academia Sinica, 2F, Activities Center , 128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

08:40–08:50

Radiation Resistance of Ge-doped Multi-Mode Fiber for Optical Links in Collider Experiments

Speaker

Prof. suen hou

08:50–09:00

Allpix² simulations of irradiated 3D columnar-electrode sensors for 4D tracking

Speaker

Jixing Ye

09:00–09:10

Design and Simulation of a Novel Bowl-shaped 3D sensor for proton therapy

Speakers

Jinxi Gu, Ms Manwen Liu, Mr Zheng Li

09:10–09:20

TCAD simulation of p-MCz Si LGAD equipped with MGR irradiated up to a mixed fluence of 1×10^{17} neq./cm²

Speaker

AJAY SRIVASTAVA

09:20–09:30

TCAD Simulation of n-Fz Double Sided Silicon Microstrip Detector Irradiated by Protons for the R3B Experiment

Speaker

Ms Puspita Chatterjee

09:30–09:40

X-ray Response Characteristics of 3D Sensor with Concentric Ring Structure

Speakers

Peng Xu, Manwen Liu, Zheng Li

09:40–09:50

CMS Phase-2 Inner Tracker for the HL-LHC Upgrade

Speakers

CMS Collaboration, Chin-Chia Kuo

09:50–10:00

Simulations of radiation-induced charge loss in ALICE ITS3 MAPS prototypes

Speaker

Isabella Sanna

10:00

10:00

ALL Poster: #31-54**Session** |**Location:** Academia Sinica, 2F, Activities Center , 128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

10:00–10:10

High precision spectroscopic observation of gamma rays from thundercloud**Speaker**

Jun Kataoka

10:10–10:20

A 25 Gbps VCSEL Driving ASIC for Detector Front-end Readout**Speakers**

Mr Di Guo, Mr Qiangjun Chen, cong zhao

10:20–10:30

Evaluation of the charge collection properties on the silicon strip detector of the LHC-ATLAS experiment**Speaker**

Sayuka Kita

10:30–10:40

Investigation of Proton Irradiation effects in n in p-Fz/p-MCz thin Si Microstrip Detector equipped with MGR up to the fluence of 1×10^{17} n eq. /cm² at FCC experiment: TCAD simulation and Experiments**Speaker**

Deepali Tanwar

10:40–10:50

A low jitter 2.56 Gbps reference-less CDR ASIC in 55 nm for NICA Multi-Purpose Detector Project**Speakers**

Di Guo, Mr cong zhao

10:50–11:00

Recent application studies of INTPIX4NA SOIPIX detector based X-ray camera using SiTCP-XG 10GbE based high-speed readout system at KEK facilities**Speaker**

Ryutaro Nishimura

11:00–11:10

A Low-Noise Analog Front-End Readout ASIC for High-Rate Applications in Pixel Detectors**Speaker**

Chunlai Dong

11:10–11:20

A wide-range RO-based PLL for particle physics experiments**Speakers**

Mr Qingkang Wu, Xiaoting Li

11:20–11:30

Dual-Layer Scintillator-Based Detector for Photon-counting Computed Tomography with Improved Spectral and Spatial Performance**Speaker**

Ryotaro Minagawa

11:30-11:40

Development and Evaluation of a Large-Area Silicon Strip Detector for Inverse Kinematics Beam Experiments at RAON

Speaker

Hye Young LEE

11:40-11:50

Assessment of the Imaging Performance of the CITIUS High-Resolution Detector for Heavy Charged Particles and Neutrons

Speaker

Yoshio Kamiya

11:50-12:00

Efficiency Simulation and Digital Periphery Optimization of COFFEE3 Chip and Beyond

Speaker

Ms Xiaoxu Zhang

12:00

12:00

ALL Poster: #55-70

Session |

Location: Academia Sinica, 2F, Activities Center , 128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

12:00-12:10

Readout the scintillation light with the CMOS image sensor IU233N5-Z

Speaker

Taishu kayanoki

12:10-12:20

TID Impact on IHEP-IME AC-LGAD Strip Sensors

Speaker

Weiyi Sun

12:20-12:30

Comparison of a Medipix3 Silicon Sensor Detector Response to X-rays and Electrons in the 5-30keV Energy Range

Speaker

Rory McFeely

12:30-12:40

Time- and Spatially-Resolved X-ray Diffraction Using the Timepix4 Hybrid Pixel Detector

Speaker

Ondřej Urban

12:40-12:50

Investigation of interstrip resistance and charge collection properties of the ATLAS18 strip sensor for HL-LHC ATLAS using 1 cm² mini-strip sensors

Speaker

Shigeki Hirose

12:50-13:00

Measurement of Threshold Voltages in PTP Structures and Estimation of P-stop Densities Across an ATLAS18 Silicon Strip Sensor Wafer Using TCAD Simulations

Speaker

Yoshinobu Unno

13:00-13:10

Evaluation of Subpixel Response of the HV-CMOS Pixel Detector AstroPix3 with 500 μm Square Pixels

Speaker

Norito Nakano

13:10-13:20

TiO₂ Based Deep UV Photodetector with Fast Response Characteristics

Speakers

Dr Parushottam Majhi, Rupa Jeena

13:20-13:30

Removal of ring artifacts in cone-beam computed tomography using a specific-artifact detection and correction scheme

Speaker

Hyesun Yang

13:30-13:40

Design and Performance Evaluation of a Filter-Free Dual-Layer Flat Panel Detector Using Monte-Carlo simulation

Speaker

Jiyong Shim

13:40-13:50

Evaluation of Performance of the p-stop Process Splits in ATLAS18 strip sensors, Pre- and Post-Irradiation

Speaker

Jana Kozakova

13:50-14:00

Solving the Sensor Cracking in ITK Strips

Speaker

Andrew Blue

14:00

14:00

ALL Poster: #71-97

Session |

Location: Academia Sinica, 2F, Activities Center , 128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

14:00-14:10

Whole-body imaging of mice administered At-211 using a high-resolution X-ray and gamma-ray camera for small animals

Speaker

Ms Yuka Kikuchi

14:10-14:20

Design and characterization of a prototype front-end readout ASIC for gas pixel detectors

Speaker

Zhuo Zhou

14:20–14:30

An initial study of in vivo imaging using two-dimensional SiPM-based photon-counting CT system**Speaker**

Minori Oshima

14:30–14:40

Analysis of unstable leakage current in ATLAS18 Strip Sensors after long-term tests**Speaker**

Christoph Klein

14:40–14:50

Simulation of the Electrical Performance of the ITk ATLAS18 Test Diode and Strip Main Sensors Before and After Irradiation**Speaker**

Yuzhan Zhao

14:50–15:00

Design and development of MAPS-based CEPC Inner Tracker**Speaker**

Xiaojie Jiang

15:00–15:10

Investigation of the current-generation mechanisms in the edge region of planar silicon sensors using TCAD and TCT**Speaker**

Peilin Li

15:10–15:20

Current and low-field carrier mobility in silicon sensors irradiated to extreme fluences**Speaker**

Christian Scharf

15:20–15:30

Proton irradiation for quality assurance of ATLAS18 strip sensors with Birmingham MC40 cyclotron**Speaker**

Thomas Thory-Rao

15:30–15:40

Impact of X-Ray Irradiation on CMOS Sensor Performance**Speaker**

Prof. Prafulla Behera

15:40–15:50

Aliasing artifact suppression using artifact map subtraction in single-grating X-ray dark-field imaging**Speaker**

Jonghyeok Lee

15:50–16:00

Timing resolution of thin planar pixel sensors coupled to TDCpix ASIC measured with Timepix4 beam telescope

16:00

16:00

Speaker

Artem Shepelev

ALL Poster: #99-128**Session |****Location:** Academia Sinica, 2F, Activities Center , 128 Section 2, Academia Road, Nankang, Taipei 115201, Taiwan

16:00–16:10

Research of the impact of electrostatic charge on the surface of silicon strip sensors**Speaker**

Qinze Li

16:10–16:20

Activation and Sensitivity Study of a Broadband X-ray Gamma-ray Detector INSPIRE for Small Satellite GRAPHIUM**Speaker**

Kazuki Yamamoto

16:20–16:30

A compact silicon strip detector design with SoC-FPGA-based readout electronics**Speaker**

MENGKE CAI

16:30–16:40

Photon-counting detector projection generation using deep learning for high-selectivity breast microcalcification differentiation**Speakers**

Hyosung Cho, Jonghyeok Lee, Soohyun Lee

16:40–16:50

Readout System for Cosmic X-ray Polarization Detector with Large-scale Pixel Array**Speaker**

Shi Qiang Zhou

16:50–17:00

Charge Response Simulation of Liquid Argon Compton Cameras for Precise MeV Gamma-Ray Event Reconstruction**Speaker**

Shota Arai

17:00–17:10

Development of a MAPS-based Silicon Pixel Beam Telescope**Speaker**

Prof. Mingyi Dong

17:10–17:20

Prototype assembly and tests for CEPC vertex detector**Speaker**

Liangchenglong Jin

17:20–17:30

SIPAC A SiPM readout ASIC for the CEPC Detector**Speaker**

YunQI Deng

17:30–17:40

A 5~36 ps Event-Driven Vernier Time-to-Digital Converter in 55-nm CMOS

Speakers

Hui Jiang, Xiongbo Yan

17:40–17:50

A large dynamic range front-end readout circuit based on first-order Delta-Sigma modulation for Calorimeters

Speaker

Ping Yang

17:50–18:00

Study of LGAD with Shallow and Deep Carbon Implantation

Speaker

Dr Yunyun Fan

18:00