

Session Program

22-26 Apr 2024



**24th IEEE Real Time Conference - ICISE, Quy
Nhon, Vietnam**

Poster A

Tuesday 23 April

11:55

Poster A

Poster Session

ROOT-based general online data visualization system

Speaker

Shuihan Zhang

The Design of Hardware Accelerator for Compute-Intensive Tasks in Solving Neutron Transport Problems by Method of Characteristics

Speaker

Prof. Thuy Le

Real-time reconstruction of plasma density profile based on deep neural network

Speaker

Dr Fei Wen

A 20 Gbps PAM4 Receiver ASIC in 55 nm for Detector Front-end Readout

Speakers

Qiangjun Chen, Prof. Di Guo

The effects of the dead layer thickness increase to the regions in the spectrum response for a coaxial HPGe detector

Speaker

Đạo (K.Y) Nguyễn Quang

Status and further development of the Tigger Time Event system for fusion experiment Wendelstein 7-X

Speaker

Jörg Schacht

AN ASSESSMENT OF EXTERNAL DOSE FROM NATURAL RADIOACTIVITY IN BUILDING MATERIALS BY USING SIMULATION MONTE CARLO

Speaker

Tran Thi Bao Ngoc

ePIC Synchronization and Timing Distribution

Speaker

Jianhui Gu

The data acquisition system of WEST's New Thomson Scattering diagnostics

Speaker

Christophe Bouchand

An investigation of a stilbene organic scintillator for fast neutron detection at Acculinna-2

Speaker

Ms Anh Mai

Magnitude of (d, p) reactions at low-energy using the Faddeev-Alt-Grassberger-Sandhas equation

Speaker

Mr Tùng Nguyễn Hoàng

Time-based electronics for T-SDHCAL

Speaker

Yongqi Tan

Preliminary Design of Data Exchange Module with USB and QSFP Interface for Test of Readout Electronics

Speaker

Mr Qiutong Pan

Dependence of Detection Efficiency and Neutron/Gamma Discrimination Ability on the Volumetric parameters of EJ-301 Liquid Scintillation Detector

Speaker

Mr Hieu Phan Bao Quoc

Evaluation of kinetics parameters of the Dalat nuclear research reactor with LEU fuel

Speakers

Duc Tu Dau, Hoai Nam Tran

The study of calibration process for the dual-threshold hybrid pixel array detector of HEPS-BPIX40

Speaker

Ms Xueke Ma

Portable codeless high-speed interlock logic controller

Speaker

Zuchao Zhang

Multi setup for giant dipole resonance studies

Speaker

Sergey Stukalov

Development of the Low Noise Front-end Electronics for Pulse Voltage Stability Measurement

Speaker

Mr Lin Jiang

The full scale prototype of the PIP-II dedicated RFPI system

Speaker

Dr Wojciech Cichalewski

PREVALENCE AND CLINICAL CHARACTERISTICS OF TRANSTHYRETIN CARDIAC AMYLOIDOSIS AMONG HEART FAILURE WITH PRESERVED EJECTION FRACTION

Speaker

Ms Miju Cheon

An Improved Algorithm for Q-scale Analysis in Jitter Decomposition

Speaker Mr Xiangshi Zhong
JUNO High Voltage & Low Voltage Power Control System Upgrade Based on EPICS Speaker 黎晃 lihuang
Data acquisition system of beam loss diagnostics for SKIF synchrotron light source Speaker Ekaterina Puryga
Low-power large-dynamic range readout ASIC for VLAST silicon strip detector Speaker Dr Gang Chen
The Design of an 8-channel, 41.7-ps Resolution Time-to-Digital Converter for STCF ECAL Speaker Dr Ziwei Zhao
Study on Readout Electronics of CEPC Scintillator Analog Hadronic Calorimeter Prototype Speaker Mr Zhongtao Shen
A Plugin-Based Software Framework for Data Acquisition and Processing Speaker Shaoshuai Fan
Fault Detection and Diagnosis Software for LHAASO Speaker Mr Hangchang Zhang
Faraday Cup Development for Beam Monitoring in nA Scale and Its Application in the Cross section Measurement of p+12C Scatterings with $E_p=1-3.2$ MeV Speaker Xuan Chung Le
Design and development of JUNO DAQ Data Flow Software Speaker Chao Chen
Implementation of the JUNO DAQ Online Software Speaker Yinhui Wu
Custom 14-Bit, 500MHz ADC/Data Processing Module for the KOTO Experiment at J-Parc Speaker Mircea Bogdan
Digital oscilloscope-based acquisition for fast and dynamic sampling of photodetector signals

<p>Speaker Son Cao</p>
<p>Verification and Validation of Real-Time Diagnostics for the KSTAR Plasma Control</p> <p>Speaker Ramon Reed</p>
<p>The Ethernet readout of the DUNE DAQ system</p> <p>Speaker Roland Sipos</p>
<p>Implementation of the Trigger, Timing, and Control Link for Data Acquisition with the Pixie-Net XL</p> <p>Speaker Wolfgang Hennig</p>
<p>Study on the Timing Performance of the SiPMs</p> <p>Speaker Sen Qian</p>
<p>Readout Electronics for a Prototype TPC-based MeV Gamma-ray Telescope</p> <p>Speaker Mr Maoyuan Zhao</p>
<p>Implementation of multi-GHz digital shaper for high-rate nuclear spectroscopy</p> <p>Speaker Andrea Abba</p>
<p>STUDY OF MODIFICATION SOLUTIONS IN THE MEANDERING RIVER WITH ALLUVIAL GROUND ALONG THE TIEN RIVER FLOWING THROUGH SA DEC - CAO LANH - CHAU THANH</p> <p>Speaker Mrs Thi Nhan Truong</p>
<p>SPLENDAQ: A Detector-Agnostic Data Acquisition System for Small-Scale Physics Experiments</p> <p>Speaker Samuel Watkins</p>
<p>Development of FPGA-Based Nuclear Electronics using NI MyRIO Hardware for Small-Scale Radiation Detector Systems</p> <p>Speakers Hoang Nguyen Quoc, Hoang Pham Viet, Nguyen Tri Toan Phuc, Phan Lê Hoàng Sang, Phong Nguyen Tan, Trang Hoang, Trương Thị Hồng Loan, Tu Nguyen Hoang, Dr Vo Hong Hai</p>
<p>Identifying Regions of Interest in the ATLAS Calorimeter with Deep Convolutional Neural Networks</p> <p>Speaker Leon Bozianu</p>
<p>Primary results of cosmic-ray recognition for a Plastic Scintillation Detector Using Machine Learning</p> <p>Speaker Nguyen Tri Toan Phuc</p>

Virtualizing experimental setups based on GATE/GEANT4 Monte Carlo simulation results

Speaker

Hoang Thi Kieu Trang

Enhancing Neutron/Gamma Discrimination in the Low-Energy Region for EJ-276 Plastic Scintillation Detector Using Machine Learning

Speaker

Dr Vo Hong Hai

A 3D track reconstruction algorithm for the pre-research of STCF MDC L1 trigger

Speaker

Yidi Hao

Measuring Performance Under Failures in the LHCb Data Acquisition Network

Speaker

Eloise Noelle Stein

Preliminary Design of a General Electronics Platform for Accelerator Facilities

Speaker

Dr Jinfu Zhu

Implementation of a double trigger condition based on Charge Comparison and TOF measurement in an FPGA for the NEDA detector array.

Speaker

Jose Manuel Deltoro Berrio

Design and Characterization Challenges of an Attoampere-Sensitive ASIC-Based Ultra-Low Current System for Real-Time Radiation Monitoring

Speaker

Dr Sarath Kundumattathil Mohanan

Real-Time Cross-Coupling removal and Monitoring in RF feedback systems: HLS-based FPGA implementation

Speaker

Nima Omidsajedi

A new methodology of clock phase adjustment in a large-scale clock distribution system for HL-LHC ATLAS TGC front-end electronics

Speaker

Mr Ren Nagasaka

A Full Digital Servo for Ultra-Stable Laser Frequency Stabilization

Speaker

Zhengtao Liu

Multi-port Remote JTAG over Optical Fibers under Radiation Environment

Speaker

Mikihiko Nakao

A 1D CNN Algorithm for Low Background β Detection with Time Projection Chamber

Speaker

Zengxuan Huang

Enhancements and Deployment of the TDAQ System for the Mu2e Experiment**Speaker**

Javier Campos

Hi'Beam-SEE: a real-time high-resolution Single Event Effects locating device for heavy ion facilities**Speakers**

Dr Jianwei Liao, Prof. Chengxin Zhao

An FPGA-Based High Precision Pulse Width Measurement Time-to-Digital Converter with Time Division Multiplexing Encoder**Speaker**

Wenhao Duan

12:55