Session Program

Jun 5 – 10, 2016

20th Real Time Conference

Poster session 1

Padova, Italy
Centro Congressi A. Luciani Via Forcellini, 170/A Padova ITALY

Tue, June 7

3:00 PM

Poster session 1

Poster Session | **Location:** Padova, Centro Congressi

New LLRF control system at LNL

Speakers
Dr Davide Pedretti, Dr Stefano Pavinato

The time synchronization of CSNS neutron Instrument

Speaker
Mr Liang Yi

Modular Software for MicroTCA.4 Based Control Applications

Speaker
Nadeem Shehzad

An Extensible Induced Position Encoding Readout Method for Micro-pattern Gas Detectors

Speakers
Mr Guangyuan YUAN, Mr Siyuan MA

FPGA Implementation of Toeplitz Hashing Extractor for Real Time Post-processing of Raw Random Numbers

Speaker
Mr Xiaoguang Zhang

Implementing a ReboT server on a Microblaze.

Speaker
Geogin Varghese

Mordicus-dhsm: a Distributed State-Machine Framework for DAQ

Speaker
Frederic Chateau

Fast and efficient algorithms for computational electromagnetics on GPU’s architecture

Speaker
Tautvydas Maceina

Assessment of General Purpose GPU systems in real-time control

Speaker
Tautvydas Jeronimas Maceina

Exploring RapidIO technology within a DAQ system event building network

Speaker
Simaolhoda Baymani

FPGA online tracking algorithm for the PANDA straw tube tracker

Speaker
Dr Yutie Liang

Benchmarking message queue libraries and network technologies to transport large data volume in the ALICE O2 system

Speaker
Adam Tadeusz Wegrzynek

Real Time Adaptive Treatment Planning for Proton Therapy Radiation Patients

Speaker
Chris Beltran

An I/O Controller for Real Time Distributed Tasks in Particle Accelerators

Speakers
Dr Davide Pedretti, Dr Stefano Pavinato

Hardware-Based Light Weight TCP/IP for 10 Gigabit Ethernet

Speaker
Dr Jie Zhang

Performance evaluation of mTCA.4 High speed ADC card for direct sampling of RF signals in linear accelerator systems

Speaker
Krzysztof Czuba

NSTXU RedHawk Linux Realtime Security Measures and Their Effect on Determinism

Speaker
Keith Erickson

MARTe real-time acquisition system of a Two-Color Interferometer for electron density measurements on FTU (Frascati tokamak upgrade).

Speaker
Mr Mateusz Gospodarczyk

Multiple Fast Controller Synchronization for ITER Control System Model

Speaker
Mr Martynas Prokopas

Fabrication of Fiber Optics Spectrometer using SiPM for Radiation Waste Measurement

Speaker
Prof. Koansik Joo

A Hybrid Analog-digital Integrator for EAST Device

Speaker
Dr Yong Wang

Data Acquisition and Protection System for a Multi-MHz Neutron Detector

Speaker
Matthias Drochner

Enabling real time reconstruction for high resolution SPECT systems

Speaker
Mélanie Bernard

FPGA-based Image Analyser for Calibration of Stereo Vision Rigs

Speaker
Dariusz Makowski

Production and Testing of the LO and CLK Generation Module Built in MicroTCA.4 Form Factor

Speaker
Tony Rohlev

TAWARA_RTM: A complete platform for a real time monitoring of contamination events of drinking water

Speaker
Dr Sandra Moretto

The Network Monitoring System based on Cacti for EAST

Speakers
Ms Chunchun Li, Dr Feng Wang, Dr Ping Wang, Dr Yong Wang, Prof. Zhenshan Ji, Dr Zuchao Zhang

Design and evaluation of a FPGA online feature extraction data pre-processing stage for the CBM-TRD experiment

Speaker
Cruz De Jesus Garcia Chavez

Brain Emulation for Image Processing

Speaker
Pierluigi Luciano

White Rabbit based sub-nsec time synchronization, time stamping and triggering in distributed large scale astroparticle physics experiments

Speaker
Martin Brückner

Design and Testing of the Bunch-by-Bunch Beam Transverse Feedback Electronics for SSRF

Speaker
Mr Jinxin Liu

A hardware implementation of the Levinson routine in a radio detector of cosmic rays to improve a suppression of the non-stationary RFI

Speaker
Zbigniew Szadkowski

Design of the Readout Electronics Prototype for LHAASO WCDA

Speaker
Mr Cong Ma

Online calibration of the TRB3 FPGA TDC with DABC software

Speaker
Joern Adamczewski-Musch

Beam Test Performance of the Prototype Trigger-less Data Acquisition for the PANDA Experiment

Speaker
Wolfgang Kühn

Signal Processing Scheme for a Low Cost LiF:ZnS(Ag) Neutron Detector with Silicon Photomultiplier

Speaker
Mr Kevin Pritchard

NaNet: FPGA-based Network Interface Cards Implementing Real-time Data Transport for HEP Experiments

Speaker
Michele Martinelli

Real-time plasma electron density feedback control system based on FPGA on J-TEXT

Speaker
Dr Wei Zheng

The Associative Memory System Infrastructure of the ATLAS Fast Tracker

Speaker
Ioannis Maznas

MicroTCA.4 based RF and Laser Cavities Requlation Including Piezo Controls

Speaker
Mr Lukasz Butkowski

Concentrator for the Readout of the PANDA Micro Vertex Detector based on MicroTCA

Speaker
Mr Harald Kleines

A Digital On-line Implementation of a Pulse-Shape Analysis Algorithm for Neutron-gamma Discrimination in the NEDA Detector

Speaker
Francisco Javier Egea Canet

Adaptive IIR-notch filter for RFI suppression in a radio detection of cosmic rays

Speaker
Zbigniew Szadkowski

An α/γ Discrimination Method for BaF2 Detector by FPGA-based Linear Neural Network

Speaker
Mr Chenfei Yang

The Coil Control Module of a Feedback System of KTX in China

Speaker
Mr Tianbo Xu

Automated Testing of MicroTCA.4 Modules

Speaker
Dr Dariusz Makowski

Control system optimization techniques for real-time applications in fusion plasmas: the RFX-mod experience

Speaker
Mr Leonardo Pigatto

A Calculation Software Based on Pipe-and-Filter Architecture for the 4πβ-γ Digital Coincidence Counting Equipment

Speaker
Zhiguo Ding

A coprocessor for the Fast Tracker Simulation

Speaker
Christos Gentsos

Fuzzy-PID based heating control system

Speaker
Dr Jian Wang

High Speed Ethernet Application for the Trigger Electronics of the New Small Wheel

Speaker
Kun Hu

Real-time resonant magnetic perturbations feedback control system for tearing mode suppression on J-TEXT

Speaker
Mr Feiran Hu

TaskRouter: A newly desinged online data processing framework

Speaker
Mr Minhao Gu

Design of a Compact Hough Transform for a new L1 Trigger Primitives Generator for the upgrade of the CMS Drift Tubes muon detector at the HL-LHC

Speaker
Nicola Pozzobon

Readout electronics and data acquisition for gaseous tracking detectors

Speaker
Dr Grzegorz Korcyl

Design and development of a real-time readout electronics system to retrieve data from a square multi-anode photomultiplier tube for neutron gamma pulse shape discrimination

Speaker
Mr Michal Cieslak

Upgrade Of The Central Logic Board For The Phase-2 Of The KM3NeT Neutrino Telescope.

Speaker
David Calvo

Particle identification on an FPGA accelerated compute platform for the LHCb Upgrade.

Speaker
Christian Faerber

Software Integrity Analysis Applied to IRIO EPICS Device Support Based On FPGA Real-Time DAQ Systems

Speaker
Dr Diego Sanz

Feasibility of software-based real-time calibration of multi-gigabit PET data

Speaker
Mr David Freese

Software tests and simulations for realtime applications based on virtual time

Speakers
Geogin Varghese, Nadeem Shehzad

Development of ATLAS Liquid Argon Calorimeter Readout Electronics for the HL-LHC

Speaker
Kai Chen

High-speed continuous DAQ system for reading out the ALICE SAMPA ASIC

Speakers
Mr Arild velure, Dr Ganesh J. Tambave

Readout electronics for Belle II imaging Time of Propagation detector

Speaker
Dr Dmitri Kotchetkov

The online event selection architecture of the CBM experiment

Speaker
Jan de Cuveland

Evaluation of 100 Gb/s LAN networks for the LHCb DAQ upgrade

Speakers
Balazs Voneki, Sebastien Valat

A new electronic board to drive the Laser calibration system of the ATLAS hadron calorimeter

Speaker
Philippe Gris

Design and test of a GBTx based board for the upgrade of the ALICE TOF readout electronics

Speaker
Davide Falchieri

A High Frame Rate Test System for The HEPS-BPIX based on NI-sbRIO Board

Speakers
Jie Zhang, Jingzi Gu

Timing and Readout Control in the LHCb Upgraded Readout System

Speaker
Cairo Caplan

Design of a concentrator for CMS trigger upgrade

Speakers
Mr Chunjie Wang, Prof. Zhen-An Liu

A Time-to-Digital Converter Based on a Digitally Controlled Oscillator

Speaker
Luigi Casu

DCT trigger in a high-resolution test platform for a detection of very inclined showers in the Pierre Auger surface detectors

Speaker
Zbigniew Szadkowski

Implementation of ITER Fast Plant Interlock System using FPGAs with cRIO

Speaker
Mariano Ruiz

Field Waveform Digitizer for BaF2 Detector Array at CSNS-WNS

Speaker
Mr Qi Wang

Emulation of a prototype FPGA track finder for the CMS Phase-2 upgrade with the CIDAF emulation framework

Speaker
Luigi Calligaris

Charged particle track reconstruction in CMS using fast algorithms implemented in hardware: an overview of the proposed implementations to be used for the HL-LHC and the current efforts to demonstrate their operation

Speaker
Kristian Hahn

Development of front-end readout electronics for CsI (Tl) gamma detection array at ETF of CSR

Speaker
Xinzhe Wang

Design of Adaptive and Fast Readout System Based on Wire Scanner

Speaker
Mr hong su

Automation and Control of a plasma experiment using EPICS

Speaker
Mr Pedro Lourenço

Fast Intra Bunch Train Charge Feedback for FELs based on Photo Injector Laser Pulse Modulation

Speaker
Tomasz KOZAK

The Gas Injection Control and Diagnostic System for the ESTHER shock Tube

Speaker
Bernardo Carvalho

Framework Upgrade of The Detector Control System for JUNO

Speaker
Mei YE

Realising real-time capabilities of an embedded control system for fast-neutron scintillation detectors

Speaker
Vytautas Astromskas

DEVELOPMENT, IMPLEMENTATION AND COMMISSIONING OF DATA ACQUISITION & CONTROL SYSTEM FOR TWIN SOURCE

Speaker
Mr ratnakar kumar yadav

HotLink receiver on CompactRIO for the ITER Electron Cyclotron Control System

Speaker
Mr João Fortunato

Real-Time Tomographic Reconstructions in MARTe with GPU Computation

Speaker
Mr Tautvydas Maceina

Development of data acquisition and control system (DACS) for long pulse operations of Indian test facility of ITER Diagnostics Neutral Beam .

Speaker
Mr Himanshu Tyagi

Development of Integrated Response Time Evaluation Methodology for the Plant Protection System

Speaker
Dr CHANG JAE LEE

Superconducting cavities cryo-module control challenges and LLRF system adaptation in case of long pulse operation mode.

Speaker
Dr Cichalewski Wojciech

Integrating real time control applications into different control systems

Speaker
Nadeem Shehzad

4:30 PM