

TWEPP 2023 Topical Workshop on Electronics for Particle Physics

Thursday, 5 October 2023

Thursday posters session (17:40 - 19:00)

[id] title	presenter	board
[193] Development of quad-channel high resolution digital picoammeter for beam diagnostics	DONATTI, Mauricio	
[190] Evaluating the RFSoc as a Software-Defined Radio Readout System for Magnetic Microcalorimeters	GARTMANN, Robert	
[180] A common readout unit for multichannel array detectors at HIRFL-CSR	LI, Xianqin	
[108] An FPGA-based Data Aggregator for ATLAS ITK Pixel DCS System	QAMESH, Ahmed	
[58] Universal test system for boards hosting bPOL12V DC-DC converters.	STACHON, Krzysztof	
[23] A Charge-integration Pixel Detector Readout Chip Features High Frame Rate with in-pixel ADCs.	LI, Mujin	
[29] A Low-Power Gated-Vernier Ring Oscillator TDC for Cryogenic Detectors	MANDAL, Soumyajit	
[67] SiGe integrated chip readout for fast timing	Dr MAZZA, Simone Michele	
[89] Development of the data transmission architecture of the stitched sensor prototype towards the ALICE ITS3 upgrade	DOROSZ, Piotr Andrzej	
[106] SAQRADC: An on-demand, low-power, minimal footprint, 10-bit resolution charge-redistribution ADC with internal clock generation	ST. JOHN, Nicholas	
[114] Development of FABulous: An Embedded FPGA Framework in 28nm CMOS	RUCKMAN, Larry Lou Jr	
[120] Two HVCMOS active pixel ASIC designs for the Measuring GCR and SEP with a combined dynamic range of >80dB	Dr PAPADOMANOLAKI, Elena	
[124] FastRICH: a readout ASIC with precise time stamping for the LHCb RICH detector	PATERNO, Andrea	
[130] The Analog Front End for FastRICH: an ASIC for the LHCb RICH Detector Upgrade	Mr MANERA ESCALERO, Rafel MANERA ESCALERO, Rafel	
[168] Design and measurements of SMAUG1, a prototype ASIC for voltage measurement using noise distribution	WEGRZYN, Grzegorz Jan WEGRZYN, Grzegorz Jan	
[184] Beam test of a baseline vertex detector for the CEPC	Mr WU, Tianya	
[191] A novel Front-End for Monolithic Active Pixel Detectors ASICs	DORDA, Ana	
[205] MightyPix at the LHCb Mighty Tracker – Verification of an HV-CMOS pixel chip's digital readout	SCHERL, Sigrid	
[32] A High Time Resolution Monolithic Active Pixel Sensor with Node-Based, Data Driven and Parallel Readout for Vertex Detector in particle physics Experiments	Dr XIAO, Le	
[54] The optimization, design and performance of the FBCM23 ASIC for the upgraded CMS beam monitoring system	WEGRZYN, Grzegorz Jan	
[65] Ionizing Radiation Influence on 28-nm MOS Transistor's Low-Frequency Noise Characteristics	APRO, Martin	

[86] Performance of a novel charge sensor on the ion detection for the development of a high-pressure avalancheless ion TPC	LIANG, Tianyu	
[101] A Radiation Hardened IP Development Programme for 28nm CMOS Technology	BOWETT, Oliver BELL, Stephen GARDINER, Thomas	
[201] Design updates for AARDVARCv4: Waveform Sampling System On Chip with Picosecond Timing Resolution	Dr MOSTAFANEZHAD, Isar	
[212] Time-Delay-Based Analog Front-End for Monitored Drift Tubes in 65 nm CMOS with < 200 ns Baseline Recovery Time and Coherent Time-over-Threshold	SHAH, Syed Adeel Ali	
[36] An FPGA-based Front-end Module Emulator for the High Granularity Timing Detector Readout Module	GE, Zhenwu	
[147] Novel developments on the OpenIPMC project	CALLIGARIS, Luigi	
[185] Implementation and performance comparison of MMC firmware on RISC-V and ARM-based MCUs	ZHANG, Jie	
[16] Silicon photonic, planar coupled, 4-channel WDM transmitter	Dr SCHNEIDER, Marc	
[217] The Optosystem: validation and testing of the high-speed optical-to-electrical conversion system for the readout of the ATLAS ITk Pixel upgrade	MOBIUS, Silke	
[141] Radiation test of commercial of the shelf (COTS) optical transceivers in the frame of the beam position monitor (BPM) consolidation project for the Large Hadron Collider (LHC)	BARROS MARIN, Manoel	
[148] Digital duty cycle correction system for clock paths in radiation-tolerant high-speed wireline transmitters	KLEKOTKO, Adam	
[150] Method for extracting the single event upset cross section from error counts in triplicated error-correction code registers	WILSON, Jon	
[182] Radiation Tolerance of the MUX64 for the High Granularity Timing Detector of ATLAS	ZHANG, Jie	
[44] Design and implementation of Neural Network based conditions for the CMS Level-1 Global Trigger upgrade for the HL-LHC	BORTOLATO, Gabriele	
[82] The phase-1 upgrade of the ATLAS level-1 calorimeter trigger	MKRTCHYAN, Tigran	
[129] Mu2e calorimeter readout electronics: design, characterisation, and radiation hardness	PAESANI, Daniele	
[170] High-speed front-end electronics and digitisation system for the Crilin calorimeter with enhanced timing performance	PAESANI, Daniele	
[187] Commissioning of the Upstream Tracker for the LHCb upgrade	ABELLAN BETETA, Carlos	
[12] Demonstration of the digital readout chain in the NvDEx experiment	LANG, Lei CHEN, Kai	
[102] Digital processing and BLMASIC control prototype for the Beam Loss Monitor system in the SPS at CERN.	SACCANI, Mathieu	
[164] Electronics Upgrade for the HADES MDC Drift Chambers	MICHEL, Jan MICHEL, Jan	
[173] Proof of principle for a novel PET detector	SELJAK, Andrej	
[175] A prototype readout system for the beam monitor at the CSR external-target experiment	LIU, Jun	
[176] Design of the ASIC readout scheme for the JUNO-TAO experiment	ZHANG, Jie	
[8] The quality control programme for ITk strip tracker module assembly	TISHELMAN-CHARNY, Abraham	

[14] RD53A Quad Modules Production and QC for the ATLAS Inner Tracker Outer Barrel (OB) Demonstrator.	Mr KHWAIRA, Yahya A R	
[38] Commissioning of the Test System for the Phase-2 Upgrade of the CMS Outer Tracker	Mr SZYDLIK, Patryk	
[72] The End-of-Substructure (EoS) card for the ATLAS Strip Tracker Upgrade – from Design to Production	RUIZ DAZA, Sara	
[46] A Custom Discrete Amplifier-Shaper-Discriminator Circuit for the Drift Chambers of the R3B Experiment at GSI	WIEBUSCH, Michael	
[91] CMS ECAL Upgrade Front End card. Design and performance.	SINGOVSKI, Alexander	
[98] Data acquisition system of the PANDA Micro-Vertex Detector (MVD)	Mrs MANZHURA, Olena	