



# TWEPP 2022 Topical Workshop on Electronics for Particle Physics

## Tuesday 20 September 2022

### Tuesday posters session (16:40 - 17:40)

[id] title	presenter	board
[188] Novel monolithic silicon detector for particle physics	TRIFONOVA, Ekaterina	
[144] Design and first test results of the CMS HGCal ECON-T ASIC including an autoencoder-inspired neural network for on-detector data compression	HOFF, James	
[26] Planar fiber-chip-coupling using angle-polished polarization maintaining fibers	Dr SCHNEIDER, Marc	
[32] Design and prototyping of large-scale flex circuits for the ATLAS ITk Pixel detector	MILLER, Graham	
[39] A 64-channel waveform sampling ASIC for SIPM in space-born applications	TEDESCO, Silvia	
[44] Test system for the PS Front-End Hybrid High Voltage filter for the CMS Phase-2 Outer Tracker Upgrade	SCHLEIDWEILER, Kevin	
[48] Electronics for the far-forward CMS muon detector upgrade, ME0	CARLSON, Joseph	
[49] BETSEE: Testing for System-Wide Effects of Single Event Errors on ITk Strips Modules	ROBERTS, Ryan	
[51] Hough transform Software, Firmware, and Hardware investigation for fast tracking in Phase-II LHC upgrades	ALFONSI, Fabrizio	
[54] Investigations on Hardware Implementable Algorithms for Particle Detector Read Out	RÖSSING, Florian	
[60] Digital cells radiation hardness study of TPSCo 65nm ISC technology by designing a Ring Oscillator	BARRILLON, Pierre	
[63] Development of a CompactPCI-Serial Hardware Toolbox for SLS-2.0	Mr POLLET, Patrick	
[72] Sub-10ps resolution TDC with dithering in 28nm CMOS technology for future 4D trackers	MARKOVIC, Bojan	
[78] A Monolithic Active Pixel Sensor with Node-Based, Data-Driven, Parallel Readout for the High Energy Physics Experiment Vertex Detector	XIAO, Le Mr YOU, bihui	
[82] Overview of the LHCb Mighty Tracker with focus on the newly developed MightyPix based on HV-CMOS technology	SCHMITZ, Hannah	
[83] LHCb PLUME Probe for Luminosity Measurement	DUARTE, Olivier	
[87] HVTrack: A monolithic HV-CMOS detector for hadron therapy	FRANKS, Matthew	
[88] The CBM-TRD Cluster Finder	SCHLEDT, David	
[96] Hamlet: High bandwidth commercial digitizer for hostile environment	SPINELLA, Franco	
[103] RD50-MPW3: A fully monolithic digital CMOS sensor for future tracking detectors	SIEBERER, Patrick	
[104] Pre-Production Testing of the AMACStar ASIC at Penn for the ATLAS ITk Detector	GOSART, Thomas Christopher	
[201] DTS-100G - A versatile heterogeneous FPGA board for cryogenic sensor readout	Mr MUSCHEID, Timo SANDER, Oliver	

<b>[197] Integration and Commissioning of the ATLAS Tile Demonstrator Module for Run 3</b>	TLOU, Humphry	
<b>[193] First Measurement Results for the front-end circuits of the Ultra-fast High Pitch digitizer System on a Chip (HPSoC) ASIC</b>	Dr LUCA, Macchiarulo	
<b>[189] Design and Digitization Architecture for HPSoC: A very high Channel Density Waveform Digitizer with sub-10ps resolution</b>	Dr MACCHIARULO, Luca	
<b>[185] New readout electronics for ATLAS ZDC detector</b>	KORCYL, Krzysztof Marian	
<b>[184] Development of the radiation and magnetic field tolerant DC/DC converter system for the ATLAS ITk Strip Detector.</b>	DYNDAL, Mateusz	
<b>[183] Development and prototyping of the Versatile Link+ fibre cabling plants for the HL-LHC upgrades of the ATLAS and CMS experiments at CERN</b>	Dr MEROLI, Stefano	
<b>[173] LHCb Scintillating Fiber Tracker Front End Electronics Test System</b>	DE FREITAS CARNEIRO DA GRACA, Ulisses	
<b>[172] Performance evaluation of the prototype pixel readout chip (CROCv1) for the CMS Inner Tracker Upgrade</b>	KAZAS, Yiannis	
<b>[171] Development of a FPGA-based Data Acquisition System (DAQ) for Muon Scattering Tomography</b>	Mr DAS, Subhendu	
<b>[170] Single-event effects calibration using two-photon absorption and a CMOS image sensor</b>	BLOMMAERT, Daan	
<b>[169] CIC a radiation tolerant 65nm data aggregation ASIC for the future CMS tracking detector at LHC</b>	NODARI, Benedetta	
<b>[168] Modern C++17 Data Pre-Processing HLS Dataflow Template Library</b>	JANSON, Thomas	
<b>[157] A high speed phase locked loop of a pixel readout ASIC for the CSR external-target experiment</b>	HU, Zhengyu GAO, Chaosong	
<b>[153] The irradiation test and upgrade of the Gigabit Transceiver For The ATLAS Inner Tracker Pixel Detector Readout Upgrade</b>	ZHANG, Li	
<b>[152] A high-resolution clock phase shifter circuitry for ALTIROC</b>	Mr HUANG, Xing	
<b>[147] System Design and Prototyping for the CMS Level-1 Trigger at the High-Luminosity LHC</b>	HERWIG, Christian	
<b>[142] Radiation hard True Single Phase Clock logic for high-speed circuits in 28 nm CMOS</b>	KLEKOTKO, Adam	
<b>[138] A Low-Power 1 Gb/s Line Driver with Configurable Pre-Emphasis for Lossy Transmission Lines</b>	Mr ST. JOHN, Nicholas	
<b>[134] Clock stability measurements using the Barrel Calorimeter Processor V1</b>	LOUKAS, Nikitas GOADHOUSE, Stephen	
<b>[126] Script-Assisted Board Layout for the CMS HGCal Readout Electronics</b>	MAHON, Devin	
<b>[120] The monolithic ASIC of the high-resolution pre-shower of the FASER experiment</b>	MARTINELLI, Fulvio	
<b>[119] Design and characterization of a cascode switching stage for high frequency radiation hardened DC/DC converters for the supply of future pixel detectors</b>	KAMPKÖTTER, Jeremias	
<b>[109] Design and preliminary results of a shunt voltage regulator for a HV-CMOS sensor in a 150 nm process</b>	POWELL, Samuel	
<b>[9] Commissioning of the new ATLAS Muon Central Trigger Processor Interface (MUCTPI)</b>	KOULOOURIS, Aimilianos	
<b>[7] Global Trigger Versatile Module for ATLAS Phase-II upgrade</b>	FILIMONOV, Viacheslav	

<b>[6] The Design and Testing of the COLDATA Concentrator ASIC for the Deep Underground Neutrino Experiment</b>	HOFF, James	
<b>[2] Radiation hardness and timing performance in MALTA monolithic Pixel sensors in Tower 180 nm</b>	SHARMA, Abhishek	
<b>[116] Trigger-less readout and unbiased data quality monitoring of the CMS Drift Tubes muon detector</b>	PAZZINI, Jacopo	