

TWEPP 2022 Topical Workshop on Electronics for Particle Physics

Tuesday, 20 September 2022

ASIC (09:00 - 10:00)

-Conveners: Marcus Julian French; Christine Guo Hu

time	[id] title	presenter
09:00	[29] HKROC: an integrated front-end ASIC to readout photomultiplier tubes for the Hyper-Kamiokande experiment	CONFORTI DI LORENZO, Selma
09:20	[177] RD53 pixel chips for ATLAS and CMS	BECCHERLE, Roberto
09:40	[45] The COLUTA ADC ASIC in the ATLAS HL-LHC Liquid Argon Calorimeter Readout	PINHEIRO MATOS, Gabriel

ASIC (11:20 - 12:20)

-Conveners: Marcus Julian French; Christine Guo Hu

time	[id] title	presenter
11:20	[57] Simulated verification of the ASIC functionality and radiation tolerance for the HL-LHC ATLAS ITk Strip Detector	DANDROY, Jeff
11:40	[165] Performance characterization and radiation tolerance evaluation of the SSA2 ASIC, the strip sensor readout ASIC of the CMS Outer Tracker at the HL-LHC	CARATELLI, Alessandro
12:00	[100] A 64 channels ASIC for the readout of the silicon strip detectors of the PANDA Micro-Vertex Detector	MAZZA, Giovanni

ASIC (14:00 - 15:00)

-Conveners: Christine Guo Hu; Marcus Julian French

time	[id] title	presenter
14:00	[33] Performance of ALTIROC2 readout ASIC with LGADs for ATLAS HGTD picosecond MIP timing detector	MORENAS, Maxime MORENAS, Maxime
14:20	[129] From the first full chain precision timing prototype ETROC1 (4x4) to the first full size full functionality ETROC2 (16x16) for CMS MTD Endcap Timing Layer (ETL) upgrade	LIU, Tiehui Ted
14:40	[146] Results with the TOFHIR2B revision of the front-end ASIC of the CMS MTD Barrel Timing Layer	BOLETTI, Alessio

ASIC (16:20 - 16:40)

-Conveners: Christine Guo Hu; Marcus Julian French

time	[id] title	presenter
16:20	[115] TimeSPOT ASIC developments for 4D-Tracking	LAI, Adriano

Wednesday, 21 September 2022

ASIC (09:00 - 10:00)

-Conveners: Ping Gui; Christine Guo Hu

time	[id] title	presenter
09:00	[110] Development of a Stitched Monolithic Pixel Sensor prototype (MOSS chip) towards the ITS3 upgrade of the ALICE Inner Tracking System	VICENTE LEITAO, Pedro
09:20	[135] Design of an analog monolithic pixel sensor prototype in TPSCo 65 nm ISC CMOS imaging technology	DENG, Wenjing
09:40	[164] Monolithic pixel sensor design for picosecond-level time resolution: the MONOLITH ERC project	PICARDI, Antonio

ASIC (11:20 - 12:20)

-Conveners: Marcus Julian French; Ping Gui

time	[id] title	presenter
11:20	[73] MiniCactus : a HV-CMOS monolithic timing sensor with sub 100 ps resolution	GUILLOUX, Fabrice
11:40	[99] FLAME SoC readout ASIC for electromagnetic calorimeter	MORON, Jakub
12:00	[200] A Study for a Radiation Tolerant SoC EcoSystem based on Open Source RISC-V hardware for future High Energy Physics applications	ANDORNO, Marco PEJASINOVIC, Risto

Thursday, 22 September 2022

ASIC (09:00 - 10:00)

-Conveners: Christine Guo Hu; Ping Gui

time	[id] title	presenter
09:00	[106] A simulation methodology for verification of transient fault tolerance of ASICs designed for high-energy physics experiments	LUPI, Matteo
09:20	[28] Analog IP Blocks in 28nm CMOS for the High Energy Physics Community	BANDI, Franco Nahuel
09:40	[95] Radiation-Tolerant All-Digital Clock Generators for HEP Applications	BIEREIGEL, Stefan

ASIC (11:20 - 12:20)

-Conveners: Ping Gui; Marcus Julian French

time	[id] title	presenter
11:20	[139] TDC with Uncontrolled Delay Lines: Calibration Approaches and Precision Improvement Methods	WU, Jinyuan
11:40	[167] Bandgap Reference, Temperature Sensor and Low Drop-out Regulator Circuits for Monolithic Sensors in TPSCo 65nm ISC Technology	YELKENCI, Asli
12:00	[196] Waveform Sampler: A 2.56GS/s 12-bit Time-Interleaved Pipelined-SAR Analog-to-Digital Converter (ADC) with on-chip Memory	WEN, Xianshan GUI, Ping