

SEFUW: Space FPGA Users Workshop, 6th Edition

Tuesday 25 March 2025

Poster session - Einstein (14:30 - 17:00)

time	[id] title	presenter
14:35	[8] Enabling Thermally Aware Processing in Multiboard Systems through Memory Synchronization	Mr PAPENDORFF, Leo
14:35	[68] FPGA firmware design and verification for the ATLAS Liquid Argon Calorimeter trigger processor using High Level Synthesis	Ms AGUIAR, Melissa
14:35	[66] Edge SpAlce: Enabling Onboard Data Compression with Machine Learning on FPGAs	GHIEMMETTI, Nicolò
14:35	[59] FEC LDPC codecs for deep space and QKD Reconciliation based on FPGA	Ms DE FLAVIIS, Benedetta Mr PROSPEROCCO, Riccardo
14:35	[57] Optimized On-Board AI Edge Processing for Earth Observation Satellites Using Rad-Tolerant Versal AI Edge	Mr LO PRESTI, Dario
14:35	[4] A reconfigurable Multi-channel router for a decentralized structure of new space applications	FAISAL, Muhamamd
15:15	[48] Pyxis: A dataflow synchronous programming approach to automated FPGA circuit production for advanced GNC algorithms	WINANDY, Inès
15:15	[63] Extending the FPG-AI Framework for Automatic DNN Acceleration on NanoXplore FPGAs	NANNIPIERI, Pietro
15:15	[28] FPGA Implementation for Time Transfer and Ranging in the COMPASSO Mission – In-Orbit Validation for Next Generation GNSS	Mr WOLF, Raphael
15:15	[31] Small Satellites, Big Opportunities: Emerging FPGA Trends for Next-Generation CubeSat Communications	Mr LÓPEZ LOVERA, Matías
15:15	[35] ESA 6G LINO – A flexible 6G non-terrestrial network platform for live evaluations and demonstrations	AMON, Michael
15:50	[55] Spiking Autoencoder Architecture for Anomaly Detection on Satellite Data with FPGAs	RITIRATO, Paolo
15:50	[3] Reliability Testing of SRAM-Based FPGA Designs through Fault Injection	ARANDA, Luis Alberto
15:50	[51] HPCEX: Space-Qualified Solution for High-Performance Computing	VAGAGGINI, Simone
15:50	[54] AI-Driven Pose Estimation for Spacecraft In-Orbit Servicing Using FPGA Acceleration	ROMERO AZPITARTE, Silvia
16:25	[46] PyXEL: A toolkit for Reliability Analysis of Reconfigurable Systems	DE SIO, Corrado
16:25	[38] Compute module redundancy management for space applications using FPGAs	Mr BHATTACHARYA, Aditya DA COSTA, Gelmar Luiz
16:25	[61] On-Board Data Processing for the Photospheric Magnetic Field Imager: Efficient Data Reduction on board ESA's Vigil Mission	Dr MORALES FERNÁNDEZ, José Miguel Mr BAILÓN MARTÍNEZ, Eduardo Ms APARICIO DEL MORAL, Beatriz Mr MORENO MANTAS, Antonio

16:25	[60] Simplifying the management of multiple ADC data interfaces using PolarFire: a case study	CAPEZZALI, Roberto
16:25	[26] Test-in-the-loop Dependable Design methodology	SMIT, Tijmen T.