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23	Raja Selvam	Raja Selvam	Data-Driven Optimization of Chemical Vapor Deposition Using Machine Learning and Surrogate Modeling
26	ATLAS Collaboration	ATLAS Collaboration, Benjamin Huth	Tracking for the next ATLAS event filter with GNNs on GPUs
28	ATLAS Collaboration	ATLAS Collaboration, Jared Burleson	Graph Neural Networks for Online Track Reconstruction using FPGAs at the Event Filter for Phase-II Upgrades for the ATLAS Experiment
30	ATLAS TDAQ collaboration	ATLAS TDAQ collaboration, Lucas Bezio	High Throughput FPGA Deployment of Distilled Deep Sets Networks for Jet Preselection in the High-Level Trigger
34	Sara Marques	Sara Marques	Planetary systems architecture based on a conditional generative model
39	Cilicia Uzziel Perez	Andrey Ustyuzhanin, Cilicia Uzziel Perez, Elisabet Golobardes Ribe, Felipe Luan Souza De Almeida, Jonas Eschle, Julian Garcia Pardinas, Justin Bartz, Katya Govorkova, Ke Wei, Matthew Scott Rudolph, Miriam Calvo Gomez, Rafael Silva Coutinho, Xavier Vilasis Cardona	When Less is More: Optimizing Graph Neural Networks and Knowledge Distillation for Efficient Particle Reconstruction and Identification in LHCb's Next-Generation Calorimeter
40	João Paulo De Souza Böger	João Paulo De Souza Böger	Towards Fast and Interpretable Physics-Informed Learning: Second-Order Neurons and Mixed-Activation Networks
44	N Ramakrishnan	N Ramakrishnan	AI-Enhanced Dual-Coated QCM Sensor with FPGA-Based Impedance Analysis for Real-Time Multi-Parameter Environmental Monitoring
45	Hao-Chun Liang	Hao-Chun Liang	Real-Time GPU Kalman-Filter Tracking via Kernel Refactoring and INT8 Surrogates for High-Luminosity Colliders
46	Davide Valsecchi	Davide Valsecchi	Efficient data movement for Machine Learning inference in heterogeneous CMS software
49	Erdem Yigit Ertorer	Danny Noonan, Erdem Yigit Ertorer, Jim Hirschauer, Mariel Peczak, Matteo Cremonesi, Nate Woodward, Nhan Tran, Peter Eduard Meiring, Philip Coleman Harris, Simon Rothman, Zachary Baldwin	Improving On-Chip Compression of High-Granularity Calorimeter Data with Conditional Autoencoders
50	Abhijith Gandrakota	Aaron Wang, Abhijith Gandrakota, Elham Khoda, Javier Mauricio Duarte, Jennifer Ngadiuba, Vivekanand Gyanchand Sahu, Zihan Zhao	Efficient and Interpretable Transformers for Particle Physics

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55	Nicolo Ghielmetti, Yaman Umuroglu	Ebby Samson, Giuseppe Franco, Ian Colbert, Nicholas Fraser, Nicolo Ghielmetti, Shane Fleming, Yaman Umuroglu	FloatQuant: Arbitrary-Precision Minifloats in QONNX
57	Jovan Mitrevski	Enrico Lupi, Harry Wang, Jovan Mitrevski, Lauri Antti Olavi Laatu, Paul White, Suleyman Demirsoy, Vladimir Loncar	Evolution of the oneAPI backend for hls4ml
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64	Jiahui Zhuo	Alvaro Fernandez Casani, Arantza De Oyanguren Campos, Jiahui Zhuo, Valerii Kholoimov	High-Throughput Ghost Track Rejection with Deep Learning at LHCb
66	Piero Viscone	Piero Viscone	FPGA-Optimized ML for Fast electron identification and pT regression with the CMS Phase-2 L1 trigger
67	Abhishikth Mallampalli, Lino Oscar Gerlach	Abhishikth Mallampalli, Isobel Ojalvo, Jennifer Ngadiuba, Lino Oscar Gerlach	Highly Granular Quantization for CICADA
68	Yuan-Tang Chou	Bai-Hong Zhou, Ben Nachman, Haoran Zhao, Qibin Liu, Shih-Chieh Hsu, Shu Li, Ting-Hsiang Hsu, Vinicius Massami Mikuni, Wei-Po Wang, Yuan-Tang Chou, Yue Xu, Yulei Zhang	EveNet: Towards a Generalist Event Transformer for Unified Understanding and Generation of Collider Data
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77	David Degen	David Degen	Enhancing Transit Detection to Uncover Long-Period Exoplanets
89	Pothuraju Naveen Yadav	Pothuraju Naveen Yadav	Scientific Machine Learning for Symbolic Recovery of Relativistic Effects in Black Hole Orbits
91	PURABI MAZUMDAR.	PURABI MAZUMDAR.	TinyML-Based Early Detection of Pak Choi Leaf Diseases Using FPGA in Vertical Farming Environments
94	Tommaso Baldi, Tran Nhan	Tommaso Baldi	Loss Landscape Analysis for Reliable Quantized ML Models for Scientific Sensing
95	Hector Gutierrez Arance	Hector Gutierrez Arance	Porting MADGRAPH to FPGA Using High-Level Synthesis (HLS)
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110	Yuan-Tang Chou	Advaith Anand, Amit Saha, Jack Patrick Rodgers, Miaoyuan Liu, Pan Li, Shih-Chieh Hsu, Shitij Govil, Siqi Miao, Yuan-Tang Chou	Locality-Sensitive Hashing-Based Efficient Point Transformer for Charged Particles Reconstruction
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125	Maira Khan	Andrew Whitbeck, Jingtian Ji, Maira Khan	Fast Adaptive Neural Control of Resonant Extraction at Fermilab
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132	Ben Hawks	Ben Hawks, Gregor von Laszewski, Marco Colombo, Nhan Tran	MLCommons Science Benchmarks
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138	Amine Haboub	Amine Haboub	Inverse Design for Femtosecond-Laser Photonic Surfaces with Direct Gradient Optimization
140	Felix Bachmair	Adam Thompson, Darren Battey, Denis Leshchev, Felix Bachmair, Michael Rissi, Sascha Grimm	A Hybrid Architecture for Real-Time Experiment Feedback in X-ray Microscopy Enabled by Edge and Cloud Computing