EuCAIFCon 2025

Tuesday, 17 June 2025

Inference & Uncertainty - T1c (16:40 - 17:40)

-**Conveners: Andreas Ipp**

time	[id] title	presenter
16:40	[21] □□ Gaussian Processes: Machine Learning for Observable Interpolation & Data Analysis	FERGUSON, Ryan
16:43	[26] □□ FAIR Universe : HiggsML Uncertainty Challenge Competition	CHAKKAPPAI, Ragansu
16:46	[27] □□ Robustly Dissecting the Gamma-Ray Sky at High Latitudes with Simulation-Based Inference	ECKNER, Christopher
16:49	[28] □□ An implementation of neural simulation-based inference for parameter estimation in ATLAS	SANDESARA, Jay
17:09	[55] □□ Fast and accurate parameter estimation of high-redshift sources with the Einstein Telescope	Dr SANTOLIQUIDO, Filippo
17:29	[167] □ Evaluating Two-Sample Tests for Validating Generators in Precision Sciences	GROSSI, Samuele
17:32	[95] □□ Learning Optimal and Interpretable Summary Statistics of Galaxy Catalogs with SBI	LEHMAN, Kai
17:35	[129] □ Using Artificial Intelligence to Scan Beyond Standard Model Parameter Spaces	SOUZA, Fernando

Wednesday, 18 June 2025

Inference & Uncertainty - T1c (15:00 - 16:00)

-Conveners: Heng Ik Siong

time	[id] title	presenter
15:00	[159] ☐ Machine Learning for Event Reconstruction in the CMS Phase-2 High Granularity Calorimeter Endcap	CUISSET, Theo
15:03	[72] ☐ Probing the Parameter Space of Axion-Like Particles Using Simulation-Based Inference	BHATTACHARJEE, Pooja
15:06	[178] ☐ GPU Accelerated Nested Sampling	YALLUP, David
15:09	[62] ☐☐ Can SBI unlock the LISA global fit?	ALVEY, James
15:29	[112] ☐☐ Scalable Bayesian Inference for Third-Generation Gravitational Wave Data with Normalizing Flows	WOUTERS, Thibeau
15:49	[150] ☐ Improved gravitational wave parameter estimation with SBI and secondary mode marginalization	ANSELMO, Chiara
15:52	[168] ☐ Gravitational-wave posterior post-processing with normalizing flows	Dr WILLIAMS, Michael
15:55	[80] ☐ Data–Driven Dark Energy: Probing w(a) with Flexknots	ORMONDROYD, Adam

Inference & Uncertainty - T1c (16:30 - 17:30)

-Conveners: Johan Messchendorp

time	[id] title	presenter
16:30	[39] ☐ Estimation of Temporal Muon Signals in Water-Cherenkov Detectors of the Surface Detector of the Pierre Auger Observatory	KUBÁTOVÁ, Margita
16:33	[67] ☐ One Shot Simulation-based Inference	Ms LYU, Huifang
16:36	[65] ☐ blackjax ns for next generation gravitational-wave inference on a GPU	PRATHABAN, Metha
16:39	[164] ☐☐ Transformers + Normalizing Flows for parameter estimation of overlapping gravitational waves in next generation detectors	DE SANTI, Federico
16:59	[174] ☐☐ TrackFormers Part 2: Enhanced Transformer-Based Models for High-Energy Physics Track Reconstruction	ZHAO, Yue
17:19	[100] ☐ Computing the Matrix Element Method with generative machine learning	VALSECCHI, Davide Prof. FELCINI, Marta
17:22	[148] ☐ Electron and Proton Classification with AMS ECAL Using Convolutional Vision Transformers and Domain Adaptation	TÜRK, Berk
17:25	[90] ☐ Track Inference of the Ion-optics of WASA-FRS based on machine learning models	CALONGE, David

Thursday, 19 June 2025

Inference & Uncertainty - T1c (16:15 - 17:15)

-**Conveners: Daniele Bonacorsi**

time	[id] title	presenter
16:15	[176] A Framework for Irregular and Sparse Time-Series Analysis	ZIVANOVIC, Uros
16:35	[46] ⬜⬜ DeepExtractor: Time-domain reconstruction of signals and glitches in gravitational wave data with deep learning	DOONEY, Tom
16:55	[104] ⬜⬜ Advancing the CMS Level-1 Trigger: Jet Tagging with DeepSets at the HL-LHC	SCHAEFER, Stella Felice