Third MODE Workshop on Differentiable Programming for Experiment Design

Monday 24 July 2023

Applications in AstroHEP: Part 1 (14:00 - 15:30)

-Conveners: Garima Singh

time	[id] title	presenter
14:00	[104] Direct Dark Matter Experiments and Machine Learning	HIGUERA PICHARDO, Aaron
14:20	Discussion	
14:30	[111] Optimization of Radio Detectors of Ultra-High Energy Neutrinos through Deep Learning and Differential Programming	HEYER, Nils
14:50	Discussion	
15:00	[112] Challenges of the LISA mission to detect gravitational waves from Space	F. SOPUERTA, Carlos
15:20	Discussion	

Tuesday 25 July 2023

Applications in AstroHEP: Part 2 (14:00 - 15:10)

  -Conveners: Maxime Lagrange

time	[id] title	presenter
14:00	[114] The GENETIS Project: optimizing detector designs for science outcomes	CONNOLLY, Amy
14:20	Discussion	
14:30	[122] Geometry Optimization of the SWGO Cherenkov Array	DORIGO, Tommaso
15:00	Discussion	

Wednesday 26 July 2023

Applications in AstroHEP: Part 3 (14:30 - 15:30)

   -Conveners: Federico Nardi

time	[id] title	presenter
14:30	[117] LBNF/DUNE Optimization	FIELDS, Laura Johanna
14:50	Discussion	
15:00	[132] Differentiable Simulation of a Liquid Argon TPC for High-Dimensional Calibration	GRANGER, Pierre
15:20	Discussion	