Second MODE Workshop on Differentiable Programming for Experiment Design

Wednesday, 14 September 2022

Applications in Muon Tomography (11:00 - 12:52)

-Conveners: Pablo Martinez Ruiz Del Arbol; Tommaso Dorigo

time	[id] title	presenter
11:00	[52] TomOpt: Differentiable Optimisation of Muon-Tomography Detectors	STRONG, Giles Chatham
11:20	Discussion	
11:25	[79] Detector optimization in Muon scattering Tomography	Mr LAGRANGE, Maxime
11:45	Discussion	
11:50	[61] Detection of material contrast in muon tomography data with machine learning	Dr BOROZDIN, Konstantin
12:10	Discussion	
12:15	[86] NEWCUT: a novel tool for reconstruction of low-energy muon spectra	OLAH LASZLO, .
12:35	Discussion	
12:40	[90] Scattering Tomography with the EM Algorithm	BORDIGNON, Anna
12:50	Discussion	

Applications in Muon Tomography (15:50 - 16:40)

-Conveners: Maxime Lagrange

time	[id] title	presenter
15:50	[68] Deep neural networks applied to muon tomography scattering angular distributions	DIEZ, Carlos
16:10	Discussion	
16:15	[65] Ultra-fast muon tomography simulations using Adversarial Neural Networks	MARTINEZ RUIZ DEL ARBOL, Pablo
16:35	Discussion	