



# Second MODE Workshop on Differentiable Programming for Experiment Design

## Tuesday, 13 September 2022

### Applications in AstroHEP (16:00 - 17:40)

-Conveners: Roberto Ruiz De Austri

time	[id] title	presenter
16:00	[77] Experiment design for 21st Century astronomy	DE OLIVEIRA ISHIDA, Emille Eugenia
16:20	Discussion	
16:25	[50] Dark Matter direct detection experiments	CEBRIAN, Susana
16:45	Discussion	
16:50	[40] Towards an End-to-End Optimization of IceCube-Gen2 Neutrino Observatory	GLASER, Christian
17:10	Discussion	
17:15	[78] Challenges in Cosmic Microwave Background Data Analysis	Dr BARREIRO, Belèn
17:35	Discussion	

# Wednesday, 14 September 2022

## Applications in AstroHEP (09:00 - 10:40)

-Conveners: Christian Glaser

time	[id] title	presenter
09:00	[57] Optimization of the Future P-ONE Neutrino Telescope	Dr HAACK, Christian
09:20	Discussion	
09:25	[70] The Einstein Telescope project	BRUNO, Giacomo
09:45	Discussion	
09:50	[49] Normalizing flows for differentiable expectation values	GLÜSENKAMP, Thorsten
10:10	Discussion	
10:15	[60] Muon identification and gamma/hadron discrimination using compact single-layered water Cherenkov detectors powered by Machine Learning techniques	GONZÁLEZ, B.S.
10:35	Discussion	