### **Session Program**

12-16 Sept 2022



## Second MODE Workshop on Differentiable Programming for Experiment Design

# Wine Tasting and Poster Session

OAC conference center, Kolymbari, Crete, Greece.

#### Wednesday 14 September

## 19:00 Wine Tasting and Poster Session Session | Location: OAC conference center, Kolymbari, Crete, Greece. 19:00-19:10 Decrypting hadronic showers for studies of particle ID with Deep Learning Speakers Rumman Neshat, Tommaso Dorigo 19:00-19:10 Differentiable Preisach Modeling for Characterization and Optimization of Particle **Accelerator Systems with Hysteresis** Speaker Ryan Roussel 19:00-19:10 (Poster) Muon identification and gamma/hadron discrimination using compact single-layered water Cherenkov detectors powered by Machine Learning techniques Speaker BS González 19:00-19:10 Muon momentum measurement in Muon Scattering Tomography Speaker Mr Maxime Lagrange 19:05-19:15 A flexible and efficient machine learning approach for data quality monitoring Speaker Dr Marco Letizia 19:10-19:20 Automatic Optimization of Derivatives with Polyhedral Compiler Speaker Alexander Demin 19:10-19:20 Reconstruction techniques for nuclear reactions measured with ACtive TARget TPC Speaker Lorenzo Domenichetti 19:10-19:20 Concept of measuring (Multi-)Strange Hadron Yields in the CBM Experiment using **Machine Learning Techniques** Speaker Axel Puntke

20:00