

Workshop on Machine Learning for Analysis of High-Energy Cosmic Particles



UNIVERSITY OF DELAWARE
BARTOL RESEARCH
INSTITUTE

Contribution ID: 24

Type: Talk

Deep Learning applied to CTAO LST-1 and the difficulty to go from simulated to real data (Remote)

Tuesday, 28 January 2025 12:15 (15 minutes)

GammaLearn is a project developing deep learning solutions for the Cherenkov Telescope Array Observatory (CTAO) data analysis. Its first application is event reconstruction based on images acquired by the Large-Sized Telescope (LST-1), currently under commissioning at La Palma.

In this talk, we present a review of the project: the architecture γ -PhysNet we have developed to tackle this multi-task problem, the results obtained on simulated and real data, as well as solutions developed to compensate for some of the issues arising from data vs simulation discrepancies.

Type of Contribution

talk

Primary authors: VUILLAUME, Thomas (LAPP, Univ. Savoie Mont-Blanc, CNRS); Dr DELL'AIERA, Michaël (LAPP, Univ. Savoie Mont-Blanc, CNRS); Dr BENOIT, Alexandre (LISTIC, Univ. Savoie Mont-Blanc)

Presenter: VUILLAUME, Thomas (LAPP, Univ. Savoie Mont-Blanc, CNRS)

Session Classification: Talks