

Session Program

17-23 Aug 2025

ML4Jets2025

Anomaly Detection

California Institute of Technology, CHEN100
1200 E. California Blvd., Pasadena, California

Tuesday 19 August

10:50

Anomaly Detection

Session | **Location:** Chen 100, Chen Neuroscience Research Building | **Convener:** Benedikt Maier

10:50–11:10 **Anomaly detections in 3 lepton channel using AutoEncoders**

Speaker

Alfredo Castaneda

11:10–11:30

Event-level Observables based on Optimal Transport for Resonant Anomaly Detection

Speaker

Aditya Bhargava

11:30–11:50 **Anomaly Detection Results from CMS**

Speaker

Oz Amram

11:50–12:10 **Weakly supervised anomaly detection with event-level variables**

Speaker

Liam Brennan

12:10–12:30

Improving the model agnostic sensitivity of weakly supervised anomaly detection

Speaker

Marie Hein

12:30–12:50

Testing the Robustness of Via Machinae Stellar Stream Detections Using Resonant Anomaly Detection

Speaker

Rafael Porto

12:50

Wednesday 20 August

10:50

Anomaly Detection

Session | **Location:** Chen 100, Chen Neuroscience Research Building | **Convener:** Oz Amram

10:50–11:10

Isolating Unisolated Upsilons with Anomaly Detection in CMS Open Data

Speaker

Radha Mastandrea

11:30–11:50

Incorporating Physical Priors into Weakly-Supervised Anomaly Detection

Speaker

Gurpreet Singh

11:50–12:10

Anomaly Detection applied to the Quality Control of new detector components

Speaker

Louis Vaslin

12:10–12:30

Debiasing Ultrafast Anomaly Detection with Posterior Agreement

Speakers

Denis-Patrick Odagiu, Denis-Patrick Odagiu

12:30–12:50

Anomaly Detection in High-Energy Particle Collisions at the LHC

Speaker

Runze Li

12:50