

Session Program

23-25 Sept 2024



Fourth MODE Workshop on Differentiable Programming for Experiment Design

Computer Science

Valencia (Spain)

Monday 23 September

15:30

Computer Science

Session | **Location:** Valencia (Spain) | **Convener:** Lisa Kusch

15:30-15:50 **Algorithmic Derivatives of Electromagnetic Shower Simulations**

Speakers

Max Aehle, Max Aehle

15:50-16:10 **Exploring End-to-end Differentiable Charged Particle Tracking**

Speaker

Tobias Kortus

16:10

Wednesday 25 September

10:00

Computer Science

Session | Location: Valencia (Spain) | Convener: Lisa Kusch

10:00-10:20

Charge Diffusion Modeling and Pixel-level Differentiability in Monolithic Active Pixel Sensors

Speaker

Alexander Schilling

10:20-10:40

Development of a Universal Simulation and Modelling Language at NASA

Speaker

Stephen Casey

10:40

11:30

Computer Science

Session | Location: Valencia (Spain) | Convener: Lisa Kusch

11:30-11:50

Automatic Differentiation in RooFit

Speaker

Vassil Vasilev

11:50-12:10

Advanced optimizations for source transformation based automatic differentiation

Speaker

Maksym Andriichuk

12:10-12:30

Automatic Differentiation of the Kokkos framework with Clad

Speaker

Atell-Yehor Krasnopol'ski

12:30