Session Program

12-16 Sept 2022



Second MODE Workshop on Differentiable Programming for Experiment Design

Progress in Computer Science

OAC conference center, Kolymbari, Crete, Greece.

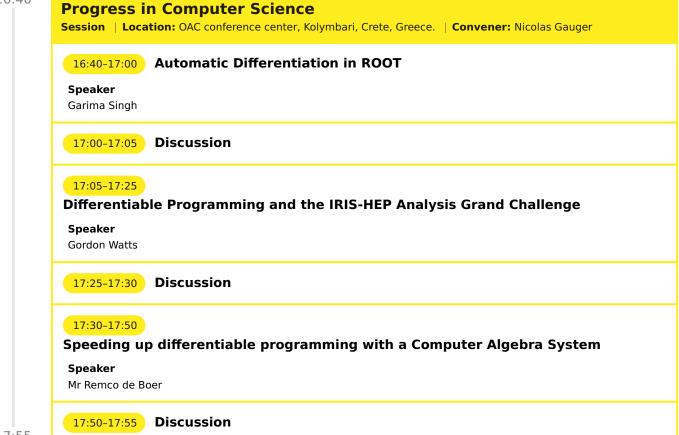
Tuesday 13 September

18:20

Progress in Computer Science Session | Location: OAC conference center, Kolymbari, Crete, Greece. | Convener: Nicolas Gauger 18:20-18:40 Differentiable Programming on relational languages. Speaker Paul Peseux 18:40-18:45 **Discussion** 18:45-19:05 In-Situ Range Verification for Particle Therapy Based on Secondary Charged **Particles** Speaker Alexander Schilling 19:05-19:10 **Discussion** 19:10-19:30 Towards Neural Charged Particle Tracking in Proton Computed Tomography with **Reinforcement Learning** Speaker Tobias Kortus 19:30-19:35 **Discussion** 19:35-19:55 Towards Algorithmic Differentiation of GATE/Geant4 Speaker Max Aehle 19:55-20:00 **Discussion** 20:00

Wednesday 14 September

16:40



17:55

Thursday 15 September

Progress in Computer Science
Session | Location: OAC conference center, Kolymbari, Crete, Greece. | Convener: Nicolas Gauger

11:10-11:30
Quantification of Uncertainties in a Model-Based Iterative Reconstruction
Algorithm for Proton Computed Tomography
Speaker
Lisa Kusch

11:30-11:35 Discussion

11:35-11:55 Synthesization of Fast Gradients with Enzyme
Speaker
William Moses

12:00 Discussion