Session Program

30 September 2024 to 4 October 2024

JuliaHEP 2024 Workshop

Talks

CERN

Monday 30 September

09:00

Talks: Monday Morning
Session | **Location:** CERN, 4/3-006 - TH Conference Room

09:00–09:10 **Welcome**

Speakers
Graeme A Stewart, Pere Mato Vila

09:10–09:40 **A Julia interface to the ROOT framework**

Speaker
Philippe Gras

09:40–09:55 **RootIO.jl: a Julia I/O library for the ROOT framework**

Speaker
Mr Yash Solanki

09:55–10:25 **RNTuple writing in Julia**

Speaker
Jerry   Ling

10:25–10:40 **EDM4hep.jl: Analysing EDM4hep files with Julia**

Speaker
Pere Mato Vila

10:40–11:00 **Coffee and Tea**

11:00–11:30 **Power of Python and Julia for Advanced Data Analysis**

Speaker
Ianna Osborne

11:30–12:00 **Demonstrator for HEP event-processing framework in Julia**

Speaker
Mateusz Jakub Fila

12:00–12:15 **FHist.jl -- status of v0.11**

Speaker
Jerry   Ling

12:30

14:00

Talks: Monday Afternoon
Session | **Location:** CERN, 4/3-006 - TH Conference Room

14:00–14:30 **Using Julia to perform Physics on time critical systems**

Speaker
Dr Evangelos Paradas

14:30–15:00

IntegrationTests.jl: a framework for the automatic generation of integration tests for Julia projects and eco systems

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Speaker

Simeon Ehrig

| 15:00–15:30 | **Enabling Julia code to run at scale with artefact caching** |

Speaker

Mr Elvis Alexander Aguero Vera

| 15:30–16:00 | **Coffee and Tea** |

| 16:00–16:30 | **Training Implicit Generative Models via an Invariant Statistical Loss** |

Speaker

Jose de Frutos

| 16:30–17:00 | **Machine Learning in Julia for Calorimeter Showers** |

Speaker

Daniel Assuncao Regado

| 17:00–17:30 | **Generating Feynman Diagrams for QED in Julia** |

Speaker

Anton Reinhard

18:30

Tuesday 1 October

09:00

Talks: Tuesday Morning
Session | **Location:** CERN, 4/3-006 - TH Conference Room

09:00–09:30 **The JuLeAna Software: How to run an entire experiment in Julia**

Speaker
Florian Henkes

09:30–10:00 **Simulation for the Tau Air-Shower Mountain-Based Observatory**

Speaker
Jeffrey Lazar

10:00–10:30 **Open-Source Simulation of Semiconductor Detectors**

Speaker
Felix Hagemann

10:30–11:00 **Coffee and Tea**

11:00–11:15 **Julia in the lab**

Speaker
Oliver Schulz

11:15–11:30 **Fast Jet Reconstruction in Julia**

Speaker
Graeme A Stewart

11:30–11:45 **Unveiling the Jet Substructure using Julia**

Speaker
Mr Sattwamo Ghosh

11:45–12:15 **Bayesian and general statistics in Julia**

Speaker
Oliver Schulz

12:30

14:00

Talks: Tuesday Afternoon
Session | **Location:** CERN, 4/3-006 - TH Conference Room

14:00–14:30 **Julia in Trigger Level Analysis of Z' to bb**

Speaker
Michael Steven Farrington

14:30–15:00 **Hadron Physics with Julia**

Speaker
Prof. Mikhail Mikhasenko

15:00–15:30 **Porting the CMS pixel reconstruction to Julia: preliminary results**

Speakers

Maya Ali, Mohamad Ayman Charaf, Mohamad Khaled Charaf

15:30–15:45   **3D Neutrino Event Display RainbowAlga.jl**

Speaker

Tamas Gal

15:45–16:00   **Empowering Underrepresented Communities Through Julia**

Speakers

Mr Shahzaib Abbas, Mr Syed Ali Asghar

16:00

Speakers

15:30–15:45

3D Neutrino Event Display RainbowAlga.jl

Speaker