

Session Program

27 November 2023 to 1 December 2023

SMARTHEP Yearly Meeting 2023 at Lund University

SMARTHEP Annual Meeting

Lund University
See logistics and accommodation for details

Monday 27 November

17:00

SMARTHEP Annual Meeting: Affiliated students / local student short presentations (5'-7' each)

Session | **Location:** Astronomihuset, Lundmarksalen | **Convener:** Caterina Doglioni

17:00-17:10 **The Baler scientific data compression Open Source project**

Speakers

Axel Gallen, Per Alexander Ekman, Pratik Jawahar

17:13-17:20 **Maximilian Amerl, University of Manchester**

Speaker

Maximilian Amerl

17:23-17:30 **Lara Calic, Lund University**

Speaker

Lara Calic

17:33-17:40 **Danielle Wilson-Edwards, University of Manchester**

Speaker

Danielle Joan Wilson-Edwards

17:43-17:50 **Sten Astrand, Lund University**

Speaker

Sten Astrand

17:53-18:00 **Kaare Iversen, Lund University**

Speaker

Kaare Endrup Iversen

18:00

Thursday 30 November

09:00

SMARTHEP Annual Meeting: Data Visualisation training

Session | **Location:** Astronomihuset, Andromeda

09:00–10:00 **Data visualisation course - part 1**

Speaker

Dr Eamonn Maguire

10:30

11:00

SMARTHEP Annual Meeting: Data Visualisation training

Session | **Location:** Astronomihuset, Andromeda

11:00–12:00 **Data visualisation training - part 2**

Speaker

Dr Eamonn Maguire

12:30

15:30

SMARTHEP Annual Meeting: Discussion with the Advisory Board members

Session | **Location:** Astronomihuset, Andromeda

16:30

16:30

SMARTHEP Annual Meeting: Outreach discussion

Session | **Location:** Astronomihuset, Andromeda | **Convener:** Caterina Doglioni

18:00

Friday 1 December

09:00

SMARTHEP Annual Meeting: ESRs to re-present their talks following feedback and training

Session | Location: Astronomihuset, Lundmarksalen

09:00–09:15

ESR1: Machine learning and Real-Time Analysis for Higgs boson measurements and fleet safety

Speakers

Henning Kirschenmann, Patin Inkaew

09:15–09:30

ESR2: Real-time rule induction in fraud detection and HEP

Speakers

Bogdan Malaescu, Laura Boggia

09:30–09:45

ESR3: Real time analysis strategies for reconstruction, exotic physics, and market analysis

Speakers

Anna Sfyrla, Leon Bozianu

09:45–10:00

ESR4: Efficient RTA in ATLAS and finance using multithreading

Speakers

Brian Petersen, Sofia Cella

10:00–10:15

ESR5: RTA on heterogeneous architectures for LHC and self-driving cars

Speakers

Fotis Giasemis, Vladimir Gligorov

10:15–10:30

ESR6: Optimization of RTA resources for LHCb Lepton Flavour Violation search and manufacturing

Speakers

Daniel Magdalinski, Gerhard Raven

10:30

11:15

SMARTHEP Annual Meeting: ESRs to re-present their talks following feedback and training

Session | Location: Astronomihuset, Andromeda

11:15–11:30

ESR7: Machine Learning for Real Time Analysis of Lepton Flavour Violation in neutral meson decays and traffic predictions

Speakers

Mr Jamie Gooding, Johannes Albrecht

11:30–11:45

ESR8: Real Time Analysis for global event triggering in LHCb and manufacturing

Speakers

Johannes Albrecht, Micol Olocco

11:45–12:00

ESR9: Real-time analysis for Dark Photons search in LHCb and smart vehicles**Speakers**

Carlos Eduardo Cocha Toapaxi, Martino Borsato, Stephanie Hansmann-Menzemer

12:00–12:15

ESR10: Real-time calibration of ALICE Time Projection Chamber and ML traffic predictions**Speakers**

Alice Ohlson, Joachim Hansen

12:15–12:30

ESR11: Real-Time Analysis through computer vision on dashcams and triggers in High Energy Physics, Verizon Connect in Florence and University of Bologna**Speakers**

Francesco Sambo, Henrique Pineiro de Monteagudo, Henrique Piñeiro Monteagudo, Samuele Salti

12:30–12:45

ESR12: Accelerated anomaly detection**Speakers**

Caterina Doglioni, Jiri Masik, Pratik Jawahar

12:45