

## **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

13:30

## SMARTHEP Annual Meeting: ESR Presentations

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

13:30–14:00 **SMARTHEP introductions and progress, meeting logistics**

### Speakers

Alice Ohlson, Andrew Carey, Caterina Doglioni, Oxana Smirnova

14:00–14:15

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

### Speakers

Henning Kirschenmann, Patin Inkaew

14:20–14:35

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

### Speakers

Bogdan Malaescu, Laura Boggia

14:40–14:55

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

### Speakers

Anna Sfyrla, Leon Bozianu

15:00

15:30

## SMARTHEP Annual Meeting: ESR Presentations

**Session** | **Location:** Astronomihuset, Lundmarksalen

15:30–15:45 **ESR4: Efficient RTA in ATLAS and finance using multithreading**

### Speakers

Brian Petersen, Sofia Cella

15:50–16:05

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

### Speakers

Fotis Giasemis, Vladimir Gligorov

16:10–16:25

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

### Speakers

Daniel Magdalinski, Gerhard Raven

16:30–16:45

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

### Speakers

Alice Ohlson, Joachim Hansen

17:00

# Tuesday 28 November

09:00

## SMARTHEP Annual Meeting: ESR Presentations

Session | Location: Astronomihuset, Andromeda

09:00–09:15

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

**Speakers**

Mr Jamie Gooding, Johannes Albrecht

09:20–09:35

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

**Speakers**

Johannes Albrecht, Micol Olocco

09:40–09:55

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

**Speakers**

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

10:00–10:15

**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

10:20–10:35

**ESR12: Accelerated anomaly detection**

**Speakers**

Caterina Doglioni, Jiri Masik, Pratik Jawahar

10:35

11:05

## SMARTHEP Annual Meeting: Advisory Board feedback and PI Q&A session for ESRs

Session | Location: Astronomihuset, Andromeda

11:05–12:05

**Session for feedback to ESRs**

12:05–12:25

**Q&A from ESRs**

12:30

13:30

## SMARTHEP Annual Meeting: Discussion on network-edited whitepapers

Session | Location: Astronomihuset, Lundmarksalen

13:30–13:50

**Round table on status of whitepapers**

**Speakers**

Caterina Doglioni, Jamie Gooding, Johannes Albrecht, Martino Borsato, Maurizio Pierini, Nicolas Sauterey, Steven Schramm, Vladimir Gligorov

13:50–14:10

**Discussion on publication venues**

	<b>Speaker</b> Caterina Doglioni
14:50	<b>14:10–14:30 Co-writing / co-editing: whitepapers and whitepaper emails</b>
16:15	<b>SMARTHEP Annual Meeting: Discussion on ML ethics, reproducibility and challenges</b>
17:15	<b>Session   Location:</b> Astronomihuset, Lundmarksalen
17:15	<b>SMARTHEP Annual Meeting: Secondment discussions</b>
	<b>Session   Location:</b> Astronomihuset, Lundmarksalen
18:15	<b>17:15–18:15 Open discussion session (secondments and more)</b>

# Wednesday 29 November

09:00

## SMARTHEP Annual Meeting: Network Assembly

**Session** | **Location:** Astronomihuset, Lundmarksalen

**09:00–09:15** **Network assembly: intro and voting matters**

**Speaker**

Caterina Doglioni

**Location**

Astronomihuset, Lundmarksalen

**09:15–10:00** **Planning for upcoming schools and deliverables**

**Speakers**

Anna Sfyrla, Caterina Doglioni, Johannes Albrecht, Maurizio Pierini, Steven Schramm, Vladimir Gligorov

**Location**

Astronomihuset, Lundmarksalen

**09:15–10:00** **ESR (self-)assembly and representation**

**Location**

Astronomihuset, Andromeda

**10:00–10:15** **Open discussion between ESRs, supervisors and advisory board**

**Speakers**

Andrew Carey, Caterina Doglioni

**Location**

Astronomihuset, Lundmarksalen

**10:15–10:30** **AOB**

**Location**

Astronomihuset, Lundmarksalen

10:30

10:30

## SMARTHEP Annual Meeting: Excursions to MAX IV and ESS

**Session** | **Location:** Lund University, See logistics and accommodation for details

16:30

16:30

## SMARTHEP Annual Meeting: Periodic report finalization

**Session** | **Location:** Fysicum, H422 | **Conveners:** Caterina Doglioni, Andrew Carey

**16:30–17:30** **Time to edit common document(s) or get feedback**

18:00

## Thursday 30 November

13:30

### SMARTHEP Annual Meeting: Presentation Skills training

**Session** | **Location:** Astronomihuset, Andromeda

13:30–15:00 **Presentation skills training**

**Speaker**

Alice Ohlson

15:00

15:30

### SMARTHEP Annual Meeting: Time to modify ESR talks according to training

**Session** | **Location:** Astronomihuset, Andromeda

16:30

## Friday 1 December

13:45

14:00

### **SMARTHEP Annual Meeting: Closing**

**Session** | **Location:** Astronomihuset, Lundmarksalen