

Session Program

8-11 Nov 2022

7th UK LArTPC Software and Analysis Workshop

LArSoft school

Science and Technology Building, C009
University of Lancaster, Lancaster, UK

Tuesday 8 November

09:05

LArSoft school: Fermilab Computing

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK | **Convener:** Andrzej Szelc

09:05-10:05

Introduction to Fermilab computing

Speaker

Miquel Nebot Guinot

10:05-10:15

Break

10:15-12:00

Setting up your workspace

Speaker

David Marsden

12:00

13:00

LArSoft school: LArSoft Simulation

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

13:00-14:00

Simulation lecture

Speakers

Dr Anyssa Navrer-Agasson, Anyssa Navrer-Agasson

14:00-17:00

Simulation tutorial

Speaker

Marina Reggiani-Guzzo

17:00

15:00-15:15

Break

Wednesday 9 November

09:00

LArSoft school: Scintillation Light

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

09:00–09:50 Scintillation photons lecture

Speaker

Andrzej Szelc

09:50–10:00 Break

10:00–12:00 Scintillation photons tutorial

Speaker

Patrick Green

12:00

13:00

LArSoft school: Reconstruction

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

13:00–13:30 Introduction to Pandora lecture

Speaker

Andy Chappell

13:30–14:30 Running the reconstruction tutorial

Speakers

Isobel Mawby, Steve Dennis

14:30–15:10 Visualise the Pandora inputs tutorial

Speakers

Isobel Mawby, Steve Dennis

15:10–15:25 Break

15:25–15:55 Overview of Pandora's algorithms lecture

Speakers

Maria Brigida Brunetti, Maria Brigida Brunetti

15:55–16:40 Visualise the algorithms results tutorial

Speakers

Isobel Mawby, Steve Dennis

16:40–17:00 Pandora outputs lecture

Speakers

Maria Brigida Brunetti, Maria Brigida Brunetti

17:00

Thursday 10 November

09:00

LArSoft school: Analysis

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

09:00–10:30 **Writing a LArSoft analyzer**

Speakers

Edward Tyley, Dr Rhiannon Jones, Rhiannon Jones

10:30–10:45 **Break**

10:45–12:00

Using your analyser for analysis (All material for this tutorial is included in the previous analyser tutorial)

Speakers

Edward Tyley, Dr Rhiannon Jones, Rhiannon Jones

12:00

13:00

LArSoft school: Analysis

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

13:00–16:00 **Using your analysis for analysis tutorial (continued)**

Speakers

Edward Tyley, Dr Rhiannon Jones, Rhiannon Jones

14:30–14:45 **Break**

16:00

16:00

LArSoft school: Deep Learning

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

16:00–17:00 **Lecture: Introduction to deep learning**

Speakers

Dr Leigh Whitehead, Leigh Whitehead

17:00

Friday 11 November

09:00

LArSoft school: Deep Learning

Session | **Location:** Science and Technology Building, C009, University of Lancaster, Lancaster, UK

09:00-10:00 **Tutorial: Introduction to deep learning**

Speakers

Leigh Whitehead, Dr Leigh Whitehead

10:00-10:30 **Lecture: Introduction to deep learning for LArTPCs**

Speaker

Andy Chappell

10:30-10:45 **BREAK**

10:45-11:55 **Tutorial: Neutrino interaction classification with ResNet18**

Speaker

Andy Chappell

11:55