Pregramme des sessions

16–18 nov. 2026



IN2P3/IRFU Machine Learning workshop 2026

AI for Physics Analysis, Inference and Discovery

LPSC, Amphitheatre
53 Avenue des Martyrs 38000 Grenoble

mar. 17 novembre

10:55

AI for Physics Analysis, Inference and Discovery: Part 1

Session | **Site:** LPSC, Amphitheatre, 53 Avenue des Martyrs 38000 Grenoble | **Responsable de session:** Dr Thomas Vuillaume

10:55 – 11:25 **Accelerating Weather Forecasts with Artificial Intelligence**

Orateur
Dr Mikaël Jacquemont

11:25 – 11:45
emulating accurately and consistently the cosmological power spectrum and the halo mass function

Orateur
johan comparat

11:45 – 12:05
Speeding-up the search for anomalies in ZTF time series with interpretable machine learning

Orateur
Emmanuel Gangler

12:05 – 12:25 **AI/ML for large galaxy survey analyses**

Orateur
Agnès Ferté

12:25 – 12:30 **Revisiting Nuclear Cross Sections for Cosmic Rays with Gaussian Processes**

Orateur
Anthony Correia

12:30 – 12:35
Physics-informed impedance-model-agnostic reconstruction of point-charge wakefields from finite bunch electromagnetic simulations

Orateur
Keon Hee Kim

12:35

14:50

AI for Physics Analysis, Inference and Discovery: Part 2

Session | **Site:** LPSC, Amphitheatre, 53 Avenue des Martyrs 38000 Grenoble | **Responsable de session:** Dr Thomas Vuillaume

14:50 – 15:10 **Hybrid Latent-Space Inference for Galaxy Deblending**

Orateur
Anna Preto

15:10 – 15:30
Accurate and efficient simulation-based inference for massive black-hole binaries with LISA

Orateur
Alice Spadaro

15:30 – 15:50 **MODULARITY: A Modular Architecture for Distributed Autonomous Scientific Discovery**

Orateur
Hayg Guler

15:50 – 15:55 **Machine Learning-Based Event Categorisation for Higgs-to-Dimuon Analyses**

Orateur
Somanko Saha

16:00

16:30

AI for Physics Analysis, Inference and Discovery: Part 3

Session | **Site:** LPSC, Amphitheatre, 53 Avenue des Martyrs 38000 Grenoble | **Responsable de session:** Dr Thomas Vuillaume

16:30 – 16:50

Self Organised Randoms for correcting systematic effects in Euclid photometric galaxy clustering.

Orateur
Dr Jérôme Odier

16:50 – 17:10

LIS² (Large Image Split Segmentation): A Modular Research Software Framework for Deep Learning on Large-Scale Scientific Images

Orateur
Dr Dominique Benielli

17:10 – 17:30 **Cosmology using topological data analysis with SBI**

Orateur
Cyrille Doux

17:30 – 17:35 **Lorentz-Equivariant Transformers for ttX multi-lepton final state at the LHC**

Orateur
JINU RAJ

17:45