Session Program

20–22 Aug 2025

HAMLET PHYSICS

How to Apply Machine Learning to
Experimental & Theoretical

August 20 - 22, 2025
Copenhagen, Denmark

HAMLET-PHYSICS 2025 Conference/Workshop

Reception

Lundbeck Auditorium

Wednesday 20 August

16:45

Reception: Poster session
Session | **Location:** Lundbeck Auditorium

16:45–18:00

Unraveling Breast Cancer Heterogeneity: Microfluidic Sorting and Bioassay-Based Functional Analysis

Speaker

Esra Yilmaz

16:45–18:00

Investigating the insulator to metal transition in $\textrm{Ca}_2\textrm{RuO}_4$ with k-means

Speaker

Anders Sandermann Mortensen

16:45–18:00

Shape and Softness Alter Particle sorting in deterministic lateral displacement : An experimental and simulation study

Speaker

Elham Akbari

16:45–18:00 **Understanding angle-resolved photoemission data in space and time**

Speaker

Philip Hofmann

16:45–18:00 **Characterizing ultrashort laser pulses with DenseNet**

Speaker

Miguel Canhota

16:45–18:00 **Efficient Quantum Vision Transformers**

Speaker

Vinay Chakravarthi Gogineni

16:45–18:00

AI/ML Impact Areas in Physics and Materials Discovery of Halide Perovskite Nanomaterials

Speakers

Ms Lidiia Varhanik, Dmitry Baranov

16:45–18:00

Perovskite Molecular Dynamics Enhanced by LATTE: Machine Learning Potentials Using Local Atomic Tensors

Speaker

Atefe Ebrahimi

16:45–18:00

Assessing Insect Biodiversity and Activity Patterns in Tropical Forests Using Entomological Lidar and Hierarchical Clustering Analysis

Speaker

Meng Li

16:45–18:00   **Unlocking the MeV Spectrum: Advancing Detector Technology with AI**

Speaker

Michał Kossakowski

16:45–18:00   **Machine Learning for Predicting Catalyst Properties in Binary Alloys**

Speaker

Dr Mailde S. Ozório

18:00

Speaker

Michał Kossakowski

Friday 22 August

13:00

14:00

Reception: (Optional) Farewell coffee / beer
Session | **Location:** Lundbeck Auditorium