

SMARTHEP Meets Industry @CERN (22nd-23rd May 2025)

Thursday 22 May 2025 - Friday 23 May 2025

CERN

Book of Abstracts

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Evening Reception

Opening session

Contributions by:

[10'] Caterina Doglioni and Micol Olocco - University of Manchester (UK) and Technical University Dortmund, SMARTHEP Project Coordinator and Early Stage Researcher organising the event

[5'] Luciano Gaido (Presenter TBC) - INFN Torino

[15'] Flash presentations from SMARTHEP industrial partners: IBM (France), LightBox (Switzerland), Point8 (Germany), Verizon Connect (Italy), Ximantis (Sweden)

[5'] Introducing the Italian Delegation Confindustria Piemonte DIH Piemonte Fondazione Piemonte Innova Italian

[45'] Flash presentations from Confindustria Piemonte Companies

Industry 4.0:

Manufacturing:

Healthcare:

Mobility:

Finance:

Energy:

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SMARTHEP Introduction

Corresponding Author: caterina.doglioni@cern.ch

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INFN

Corresponding Author: bagnasco@to.infn.it

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SMARTHEP Industry Partners

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Visiting Delegation

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Italian/French Industries

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Welcoming

Corresponding Author: micol.oloocco@cern.ch

ESRs' presentations / 8

GRAPH NEURAL NETWORK TRAFFIC PREDICTIONS ON REAL-TIME OBSERVATIONS

Corresponding Author: alexandros.sopasakis@math.lth.se

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LEARNING TRAFFIC ANOMALIES FROM GENERATIVE MODELS ON REAL-TIME OBSERVATIONS

Corresponding Author: alexandros.sopasakis@math.lth.se

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SIMULATION OF STREET VIDEO SCENES FOR OBJECT DETECTION MODELS IN COMPUTER VISION

Corresponding Author: henrique.pineiro2@unibo.it

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ROAD SCENE UNDERSTANDING FOR RISK ANTICIPATION FROM EGO-VEHICLE DATA

Corresponding Author: henrique.pineiro2@unibo.it

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EFFECTS OF VIEWPOINT SHIFTS IN BIRD-EYE VIEW SEGMENTATION

Corresponding Author: patin.inkaew@cern.ch

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STUDY OF INDUSTRIAL TIME SERIES DATA FOR SEGMENTATION AND PATTERN IDENTIFICATION

Corresponding Author: daniel.magdalinski@cern.ch

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DEVELOPMENT OF SIMULATION- BASED INFERENCE INTERFACES IN THE ROOT SOFTWARE FRAMEWORK FOR INDUSTRIAL APPLICATIONS

Corresponding Author: jamie.gooding@cern.ch

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REAL-TIME DATA ACQUISITION AND ANALYSIS FOR HIGH-FREQUENCY MONITORING IN INDUSTRY 4.0 AND BEYOND

Corresponding Author: maximilian.amerl@cern.ch

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OPTIMIZED MACHINE LEARNING INFERENCE THROUGH HETEROGENEOUS ARCHITECTURES

Corresponding Author: sanjiban.sengupta@cern.ch

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JET ENERGY CALIBRATION WITH REAL-TIME MACHINE LEARNING TRAINING AND ANOMALY DETECTION IN HIGH-ENERGY PHYSICS AND FINANCE

Corresponding Author: lboggia@lpnhe.in2p3.fr

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NEXT-GEN BANKING FRAUD SIMULATION WITH AGENT-BASED MODELING AND LLMs

Corresponding Author: micol.oloocco@cern.ch

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REAL-TIME MARKET ANALYSIS WITH RECURRENT NEURAL NETWORKS FOR PREDICTIVE INSIGHTS

Corresponding Author: leon.bozianu@cern.ch

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STUDY OF HISTORICAL TIMESERIES OF FINANCIAL DATA TO DEVELOP MACHINE LEARNING APPLICATIONS FOR ANALYSIS AND PREDICTION OF FINANCIAL ASSETS

Corresponding Author: sofia.cella@cern.ch

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Towards SMARTHEP2

Corresponding Authors: henning.kirschenmann@cern.ch, caterina.doglioni@cern.ch