## **Session Program**

21-26 Sept 2025



# **European Nuclear Physics Conference 2025**Nuclear Physics Applications

Moho 16 bis Quai Hamelin 14000 CAEN

## **Monday 22 September**

17:00

#### **Nuclear Physics Applications: 1**

Session | Location: Moho, 16 bis Quai Hamelin 14000 CAEN | Convener: Eric Dumonteil

17:00-17:25

Developments of Compact Accelerator driven Neutron Sources, news from SATELIT, the Saclay Target with liquid Lithium

Speaker

Loïc THULLIEZ

17:25-17:45

Re-TOF: A novel detector for the measurement of the fission cross section induced by high energy neutrons

Speaker

Roberto Zarrella

17:45-18:05

Enhancing Target Development at GANIL for Nuclear Research: Optimization of the Deposition Technique for Lanthanide Targets

Speaker

Radia RAHALI

18:05–18:25 Medical radioisotope production using laser-driven accelerators

Speaker

Jose Benlliure

18:25-18:45

Enhancing charge collection efficiency in radiation-damaged unmetallized 4H-SiC detectors via LED Illumination

Speaker

Mauricio Rodríguez Ramos

18:45 17:00

#### **Nuclear Physics Applications: 2**

Session | Location: Moho, 16 bis Quai Hamelin 14000 CAEN | Convener: Eric Dumonteil

17:00-17:20

Deep Learning-Driven Differentiable Autoplanning for Proton Therapy: A Proof-of-Concept

Speaker

Lorenzo Arsini

17:20-17:40 Model bias and parameter optimisation with the example of INCL/ABLA

Speaker

Jason Hirtz

17:40-18:00

Bayesian optimization on FIFRELIN Monte-Carlo code to fit neutron and gamma multiplicities

Speaker

Guillaume Bazelaire

18:00–18:20 Hybrid Nuclear Interaction Models for Improved Fragmentation Modeling in Ion Therapy

Speaker
Dr Lorenzo Arsini

18:20

## **Tuesday 23 September**

17:00

#### **Nuclear Physics Applications: 3**

Session | Location: Moho, 16 bis Quai Hamelin 14000 CAEN

17:00-17:25 Recent Advances in Hadron Therapy

Speaker

Charlot Vandevoorde

17:25-17:45 Dosimetry and cellular mechanisms of carbon ion FLASH irradiations

Speaker

Mateusz Sitarz

17:45-18:05 A new model for p +9Be reaction as BNCT neutron source

Speaker

Alessandro Colombi

18:05-18:25

Secondary fragment production in ion Beam therapy: experimental measurements for nuclear model improvement

Speaker

Lévana Gesson

18:25-18:50 CYCLHAD and the C400 accelerator for ion therapy and research

Speaker

Mr GABRIEL GAUBERT

18:50-19:10

Measurement of the neutron shielding efficacy of magnetite for Proton Therapy Facilities and other applications

Speaker

Kijun Park

19:10 17:00

### **Nuclear Physics Applications: 4**

Session | Location: Moho, 16 bis Quai Hamelin 14000 CAEN

17:00-17:20

VENDETA: VErsatile Neutron DETector Array, a new high-resolution neutron time-of-flight measurement array

Speaker

Owen Syrett

17:20-17:40 Measurement of \$^{63,65}\$Cu neutron capture cross sections at the n\$\\_\$TOF facility

Speaker

Nicholas Pieretti

17:40-18:00 First Fragmentation Cross Section Measurements with the Full FOOT setup

Speaker

Giacomo Ubaldi

18:00-18:20

Elemental and angular differential fragmentation cross section measurements with the FOOT experiment

Speaker

Matilde Dondi

18:20-18:40

Experimental insights into neutron-induced fission of \$^{235}\$U and \$^{237}\$Np using the FALSTAFF spectrometer at NFS

Speaker

Deby Treasa Kattikat Melcom

18:40-19:00

Investing Quasi Fission Dynamics of  $^{35}$  CI +  $^{181}$  Ta and  $^{35}$  CI +  $^{205}$  TI

Speaker

Ajmira Sultana

19:00

## **Thursday 25 September**

14:20

**Nuclear Physics Applications: 5** Session | Location: Moho, 16 bis Quai Hamelin 14000 CAEN 14:20-14:45 New challenges for experimental data dedicated to nuclear reactor physics Maëlle KERVENO 14:45-15:05 IAEA activities in support of nuclear physics research and applications Speaker Dr Danas Ridikas 15:05-15:25 Modelling \$\gamma\$-spectrum from d-t collisions: potential for industrial applications Natalia Timofeyuk 15:25-15:50 Utilizing beams of MeV ions for measurements of kinetics in materials on the atomic scale Speaker Daniel Primetzhofer 15:50-16:10 Retention effects in the Szilard-Chalmers reaction for solutions of ethyl iodide and ethanol Speaker Luigi Redigolo 16:10-16:30 First results of (n,alpha) measurements on F-19 with the SCALP detector Speaker François-René Lecolley 16:30-16:50 Performance Evaluation and Simulation of Segmented SiC-Based Particle Detectors for Dosimetry and **Real-Time Monitoring** Speaker GIUSEPPE FERDINANDO D'AGATA

16:50