

**Session Program**

**11-15 May 2026**

**XXII LNF SPRING SCHOOL "BRUNO  
TOUSCHEK" in Nuclear, Subnuclear and  
Astroparticle Physics**

***9th Young Researchers' Workshop***

Laboratori Nazionali di Frascati (Rome), Italy, Building 36, Aula Salvini  
Via E.Fermi 54 I-00044 Frascati (RM)

# Monday 11 May

16:15

## 9th Young Researchers' Workshop

**Session** |

**Location:** Laboratori Nazionali di Frascati (Rome), Italy, Building 36, Aula Salvini, Via E.Fermi 54 I-00044 Frascati (RM)

16:15–16:30

### Hunting Dark Matter with Stellar Wakes

**Speaker**

Sven Poder

16:30–16:45

### Effective models for two-component scalar dark matter with $Z2n$ symmetries

**Speaker**

Simon Gonzalez Gomez

16:45–17:00

### Most intense solar events on current cycle 25

**Speaker**

Olaf Enriquez

17:00–17:15

### Machine Learning and Advanced Signal Processing applications in the CYGNO TPC

**Speaker**

Federico Francesco Scamporlino

17:15–17:30

### The Mu2e Electromagnetic Calorimeter

**Speaker**

Sabrina Salamino

17:30–17:45

### The new PADME Micromegas

**Speaker**

William Natale

17:45–18:00

### Search for Spin-2 Dark Sector with Beam-dump Experiments

**Speaker**

Ali-Dzhan Ali

18:00–18:15

### Ultrathin Wires and Digitization Development for the IDEA Drift Chamber at FCC-ee

**Speaker**

Muhammad Saiel

18:15–18:30

### Hyperparameter Optimization of Deep Learning Models for Cluster Counting

**Speaker**

Ali Asif

18:30–18:45

### X17 Boson Measurements at CERN n-TOF

**Speaker**

Behnam Ali Mohammadzadeh

18:45-19:00

**Beyond the Factorization Scheme in Weak Nuclear Transitions**

**Speaker**

Michele Cau

19:00-19:15

**Neutrino-Electron Elastic Scattering Off Bound Electrons: A Stepping Approximation Study**

**Speaker**

Daniele Caboni

19:15

## Wednesday 13 May

16:15

### 9th Young Researchers' Workshop

**Session** |

**Location:** Laboratori Nazionali di Frascati (Rome), Italy, Building 36, Aula Salvini, Via E.Fermi 54 I-00044 Frascati (RM)

16:15–16:30 **From unpolarized to polarized collisions at LHCb**

**Speaker**

Barbara Lopes Pereira

16:30–16:45

**Selection rules for charged lepton and down quarks operators from residual flavour groups**

**Speaker**

Nicole Tognetti

16:45–17:00

**Quark hierarchies and spontaneous CP violation from Siegel modular forms**

**Speaker**

Matteo Parriciatu

17:00–17:15

**Kaonic atoms with new CZT Detectors and Machine Learning applications**

**Speaker**

Francesco Artibani

17:15–17:30

**Hyperon form factors in the complex plane**

**Speaker**

Francesco Rosini

17:30–17:45

**Jet Modifications Across QGP and Hadronic Phases in J-PHASE Generator with SUBA-Jet**

**Speaker**

Josef Bobek

17:45–18:00

**The FOOT Experiment: Physics Motivation and VTX Testing**

**Speaker**

Laura Rocchetti

18:00–18:15

**Vacuum structure of a 331 model**

**Speaker**

Vinicius Padovani

18:15–18:30

**The new ATLAS pixel detector for HL-LHC**

**Speaker**

Beka Buadze

18:30-18:45

**Exploring the Dark Sector at the Short-Baseline Near Detector: A Simplified Framework Implementation in MeV Portal**

**Speaker**

Gaetano Fricano

18:45-19:00

**Perovskite-based radiation detectors**

**Speaker**

Amir Khan

19:00