

## **Session Program**

**26-27 Jan 2023**

# **Zurich PhD Seminars 2022**

## ***Session***

UZH, Y-11-F06  
Irchel Campus

# Thursday 26 January

09:00

## Session: I

**Session** | **Convener:** Patrick Haworth Owen

09:00–09:30

### Search for Lepton Flavour Universality Violation at the CMS experiment in $B_c$ semileptonic decays

**Speaker**

Federica Riti

09:30–10:00

### Test of lepton flavour universality in $B^+ \rightarrow K^+ l^+ l^-$ decays in high di-lepton invariant mass squared region

**Speaker**

Vadym Denysenko

10:00–10:30

### Combination of Higgs Differential Production Cross Section and Effective Field Theory Interpretation

**Speaker**

Massimiliano Galli

10:30–11:00

### Effects of Inter-Crystal Optical Separation Layers on Unwanted Light Crosstalk and on performance Parameters of the SAFIR PET/MR Scanner

**Speaker**

Pascal Laurent Bebie

11:00

11:30

## Session: II

**Session** | **Convener:** Annapaola De Cosa

11:30–12:00

### Low energy leptons in high energy physics

**Speaker**

Peter Eduard Meiring

12:00–12:30

### Search for non-resonant production of semivisible jets with the CMS experiment

**Speaker**

Florian Eble

12:30–13:00

### Diffusion in the hyperfine-splitting experiment with muonic hydrogen

**Speaker**

Jonas Nuber

13:00

14:00

## Session: III

**Session** | **Convener:** Dr Ben Ohayon

14:00–14:30

### Laser System for the hyperfine splitting in muonic hydrogen

15:30

**Speaker**

Lukas Affolter

14:30–15:00

**Muonic atom spectroscopy with radioactive targets****Speaker**

Stergiani Marina Vogiatzi

15:00–15:30

**Wavelength-shifting materials & liquid argon instrumentation of the neutrinoless double beta ( $0\nu\beta\beta$ )-decay search experiment LEGEND****Speaker**

Mrs Gabriela Rodrigues Araujo

16:00

**Session: IV****Session** | **Conveners:** Michelle Galloway, Michelle Galloway

16:00–16:30

**The low-background germanium counting facility Gator for high-sensitivity  $\gamma$ -ray spectrometry****Speaker**

Mr Alexander Bismark

16:30–17:00

**Bayesian Calibration and Sensitivity Analysis of Non-Proportional Scintillation Models for Airborne Gamma-Ray Spectrometry Applications****Speaker**

David Breitenmoser

17:00–17:30

**Characterization of passive CMOS sensors for the HL-LHC upgrade****Speaker**

Franz Glessgen

17:30

# Friday 27 January

09:00

## Session: V

**Session** | **Convener:** Andreas Adelman

09:00–09:30

### Serial powering for the Phase 2 upgrade of the CMS pixel detector and RD53A pixel module performance

**Speaker**

Vasilije Perovic

09:30–10:00

### Detection and Forecasting of particle accelerator interlocks

**Speaker**

Sichen Li

10:00–10:30

### The High - Intensity Muon Beams (HIMB) project

**Speaker**

Giovanni Dal Maso

10:30

11:00

## Session: VI

**Session** | **Convener:** Iaroslava Bezshyiko

11:00–11:30

### Uncertainty Quantification for Characterising Spent Nuclear Fuel

**Speaker**

Arnau Alba Jacas

11:30–12:00

### Dead Time Effects and Image Quality Evaluation at High Activities for the SAFIR Dual Ring Prototype

**Speaker**

Jan Debus

12:00–12:30

### Low-energy nucleon structure at the precision frontier

**Speaker**

Vladislava. Sharkovska

12:30

13:30

## Session: VII

**Session** | **Convener:** Xuan Chen

13:30–14:00

### Quantum machine learning for classification and anomaly detection tasks in high energy physics

**Speaker**

Vasilis Belis

14:00–14:30

### Antenna subtraction in colour space: automation and application to high-multiplicity processes

15:00	<b>Speaker</b> Matteo Marcoli
	<b>14:30–15:00    Status of OpenLoops at two loops</b>
	<b>Speaker</b> Natalie Schär
15:30	<b>Session: VIII</b> <b>Session</b>   <b>Convener:</b> Alessandro Calandri
17:00	<b>15:30–16:00</b> <b>Exploration of the physical limits for Cherenkov positron emission tomography using tiny crystals and a large cube</b> <b>Speaker</b> Sofiia Forostenko
	<b>16:00–16:30    A muon beam of small phase space</b> <b>Speaker</b> Giuseppe Lospalluto
	<b>16:30–17:00    ttH production at NNLO</b> <b>Speakers</b> Chiara Savoini, Chiara Savoini