

Session Program

3-5 Dec 2025

**Exotic atoms: fundamental aspects,
applications and advances in radiation
detectors**

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Wednesday 3 December

14:00

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | Location: Room 102, Department of Physics (FIZIKA), Bijenicka 32 | Convener: Leonardo Abbene

14:00–14:30

Development and evolution of multilayer Medical Applications CompAct Compton camera (MACACO)

Speaker

Dr Siddharth Parashari

14:30–15:00

Compton camera with dual perpendicular silicon photomultiplier read-out - a Monte Carlo study

Speaker

Ana Marija Kožuljević

15:00–15:30

Performance of a single-plane readout Compton camera

Speaker

Mr Om prakash Dash

15:30

16:00

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | Location: Room 102, Department of Physics (FIZIKA), Bijenicka 32 | Convener: Leonardo Abbene

16:00–16:30

Ortho-positronium decay - a table-top tool for testing the fundamental physics

Speaker

Prof. Ivica Friščić

16:30–17:00

Optically stimulated luminescence dosimetry: system characterisation and application in remote dosimetry audits in radiotherapy photon and electron beams

Speaker

tomislav bokulic

17:00

Thursday 4 December

09:15

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | **Location:** Institute of Physics, Bijenička 46 | **Convener:** Mihael Makek

09:15–10:00

First Positronium and Quantum Entanglement Imaging of humans with J-PET

Speaker

Paweł Moskal

10:00–10:30

PetVision planar TOF-PET detector development

Speaker

Andrej Lozar

10:30–11:00

Experimental determination of Dalitz Plot for positronium decay using the J-PET detection system

Speaker

Magdalena Skurzok

11:00

11:30

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | **Location:** Institute of Physics, Bijenička 46 | **Convener:** Mihael Makek

11:30–12:00

The physics of the kaonic atoms in the last 25 years

Speaker

Dr Diana Sirghi

12:01–12:30

Cutting-edge X-ray detectors for precision spectroscopy of exotic atoms

Speaker

Alessandro Scordo

12:30

14:00

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | **Location:** Institute of Physics, Bijenička 46 | **Convener:** Alessandro Scordo

14:00–14:30

Implementation and optimization of a home-built cosmic veto system using digital electronics in environmental gamma spectrometry laboratory

Speaker

Ivana Tucaković

14:30–15:00

Compton background suppression in environmental gamma spectrometry measurements

Speaker

Luka Bakrač

15:00

Friday 5 December

09:00

Exotic atoms: fundamental aspects, applications and advances in radiation detectors

Session | **Location:** Institute of Physics, Bijenička 46 | **Convener:** Magdalena Skurzok

09:00–09:30

Positronium in liver cancer diagnostics

Speaker

Dr Božena Zgardzińska

09:30–10:00

Positron emission tomography imaging harnessing polarization correlations

Speaker

Prof. Mihael Makek

10:00–10:30

A modification of the Pryce-Ward formula for semi-classical simulations of annihilation photons correlations

Speaker

Petar Zugec

10:30