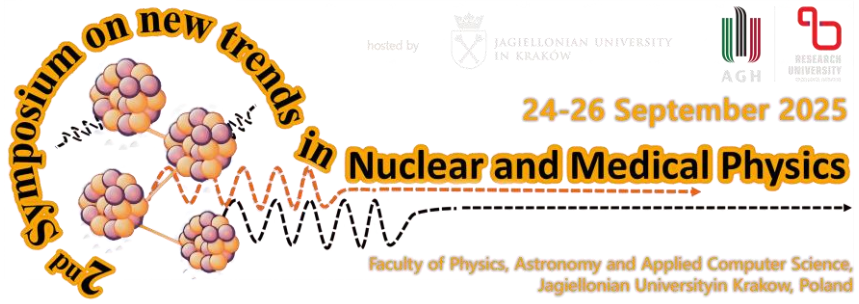

Wednesday 24/09

8:00 - 9:00	***Registration, Coffee***
9:00 - 9:15	***Opening***
Positronium research	Chair: Reimund Bayerlein
9:15 - 9:40	**Invited talk: Kenji Shimazoe (The University of Tokyo, Japan):** *Direct three gamma positronium imaging and cascade gamma chemical imaging*
9:40 - 10:05	**Invited talk: Koji Michishio (National Institute of Advanced Industrial Science and Technology (AIST), Japan):** *Development of a high-quality, energy-tunable positronium beam via photodetachment of positronium negative ions*
10:05 - 10:20	**Ewa Dryzek (Institute of Nuclear Physics, Polish Academy of Sciences, Poland):** *Application of Positron Annihilation Lifetime Spectroscopy in Polymer Composites*
10:20 - 10:45	**Paweł Moskal (Jagiellonian University, Poland):** *Prospects for Positronium and Quantum Entanglement Imaging with J-PET*
10:45 - 10:55	**Manish Das (Jagiellonian University, Poland):** *First experimental demonstration of positronium lifetime imaging with the novel radionuclide ^{52}Mn using J-PET scanner*
10:55 - 11:30	***Coffee break***
Detector Technologies	Chair: Rudrajyoti Palit
11:30 - 11:55	**Invited talk: Paolo Finocchiaro (INFN - Laboratori Nazionali del Sud, Italy):** *Miniature Scintillating Detectors and SiPMs: a brief Summary and a few Applications*
11:55 - 12:20	**Invited talk: Tuba Conka Yildiz (Fraunhofer IIS, Germany):** *Cd(Zn)Te in Medical Imaging: Academic Innovation and Market Transformation*
12:20 - 12:35	**Saliha Bashir (AGH University of Science and Technology, Poland):** *Radiation Damage Monitoring in the Upgraded VELO Detector at LHCb*
12:35 - 12:50	**Priyanka Priyanka (University of Delhi, India):** *Simulated Signal Database for Improved Resolution in Position Sensitive Planar Germanium Detector*
12:50 - 13:05	**Flaminia Quattrini (Sapienza University of Rome, Italy):** *Development of high-Z organic scintillators for modern SPECT imaging and theranostic dosimetry*

13:05 - 14:15	***Lunch break***
Nuclear/Particle studies	Chair: Magdalena Skurzok
14:15 - 14:40	**Invited talk: Yoshiki Tanaka (RIKEN, Japan):** *Search for eta'-mesic nuclei with (p,dp) reaction at GSI/FAIR*
14:40 - 15:05	**Invited talk: Simone Manti (INFN - Laboratori Nazionali di Frascati, Italy):** *High Precision X-ray Spectroscopy: from Kaonic Atoms to Societal Applications*
15:05 - 15:20	**Alessio Porcelli (Jagiellonian University, Poland):** *µPPET, a J-PET application for cosmic rays investigation*
15:20 - 15:35	**Francesco Giacosa (Jan Kochanowski University, Poland):** *Decay Law of Selected Fluorescent Substances*
15:35 - 16:05	***Coffee break***
Radiotherapy monitoring	Chair: Bram Carlier
16:05 - 16:30	**Invited talk: Tomasz Matulewicz (University of Warsaw, Poland):** *Proton-induced nuclear reactions in the hadrontherapy energy range*
16:30 - 16:55	**Invited talk: Aafke Kraan (INFN - Sezione di Pisa, Italy):** *Fragmentation measurements for particle therapy with the FOOT experiment*
16:55 - 17:10	**Kamila Kalecińska (AGH University of Science and Technology, Poland):** *Plan-Guided Super-Resolution of Dose Distribution*
17:10 - 17:25	***Coffee break***
17:25 - 17:40	**Magdalena Kołodziej (University of Lübeck, Germany)**: *Silicon as beam-activated tumour tracer for online proton therapy monitoring – experimental study*
17:40 - 17:55	**Martina Moglioni (GSI, Germany):** *In-beam PET monitoring during radioactive ion beams irradiation for real-time dose discrepacies and anatomical change detection*
17:55 - 18:10	**Daria Boscolo (GSI, Germany):** *Treatment and online PET imaging of a mouse tumor with radioactive ion beams*

Thursday 25/09

EV/preclinical imaging	Chair: Bartosz Leszczyński
9:00 - 9:25	**Invited talk: Edvin van der Pol (Amsterdam University Medical Center, Netherlands):** *Extracellular vesicle flow cytometry: what's possible and what's next?*
9:25 - 9:50	**Invited talk: Ewa Stępień (Jagiellonian University, Poland):** *EVs as a non-invasive approach to diagnose and monitor metabolic diseases*
9:50 - 10:05	**Magdalena Skalska (Jagiellonian University, Poland):** *Lipid Remodelling in Extracellular Vesicles from β-Cells under Hyperglycemic Stress - Multimodal Mass Spectrometry Approach*
10:05 - 10:20	**Raffael Ferragut (Polytechnic of Milan, Italy):** *Development of a millifluidic platform for slow positron beam studies of biological samples*
10:20 - 10:35	**Anna Gromotowicz-Popławska (Medical University of Bialystok, Poland):** *Perspectives on Preclinical Molecular Imaging Research at the Radiopharmacy Centre, Medical University of Bialystok*
10:35 - 11:05	***CONFERENCE PHOTO* & *Coffee break***
Radiopharmaceuticals	Chair: Ewa Stępień
11:05 - 11:30	**Invited talk: Agnieszka Majkowska-Pilip (Institute of Nuclear Chemistry and Technology, Poland):** *Nanobrachytherapy of Triple-Negative Breast Cancer and Glioblastoma Multiforme Using Auger Emitters*
11:30 - 11:55	**Invited talk: Biswajit Das (University of California & Lawrence Berkeley National Laboratory, USA):** *Preclinical Ac-225 Imaging for Targeted Alpha Therapy: Accelerating Cancer Therapeutics*
11:55 - 12:10	**Jarosław Choiński (Heavy Ion Laboratory, University of Warsaw, Poland):** *30th anniversary of the Heavy Ion Laboratory of the University of Warsaw and its contribution to the production of medical radioisotopes*
12:10 - 12:25	**Daniel Guendel (Helmholtz-Zentrum Dresden-Rossendorf, Germany):** *Impact of the Midkine expression on the uptake of [18F]FDG and [18F]FET in chicken chorioallantoic membrane glioblastoma models*
12:25 - 12:40	**Monika Łyczko (Institute of Nuclear Chemistry and Technology, Poland):** *The ^{103}Pd and ^{109}Pd Bisphosphonate Complexes for Auger Electron Therapy of Bone Metastatic Tumor Cells*
12:40 - 13:45	***Lunch break***
13:45 - 15:00	***POSTER SESSION* & *Coffee***
15:00 - 18:00	**(HPDA) Training**
19:30	**Conference dinner in Galicyjska Restaurant**

Friday 26/09

Positron Emission Tomography	Chair: Paweł Moskal
9:00 - 9:25	**Invited talk: Qiyu Peng (Shenzhen Bay Laboratory, China):** *Development of Advanced PET Technology for Scientific and Clinical Applications*
9:25 - 9:50	**Invited talk: Reimund Bayerlein (UC Davis, USA):** *Modern Data Correction Approaches in Positron Emission Tomography*
9:50 - 10:05	**Macoto Fujimoto (The University of Tokyo, Japan):** *Direct imaging of the three-photon annihilation process beyond PET*
10:05 - 10:20	**Martin Readler (Jagiellonian University, Poland):** *Optimizing the event selection of the total-body J-PET scanner with a brain PET insert: a simulation study*
10:20 – 10:50	***Coffee break***
Positronium research	Chair: Sushil Sharma
10:50 – 11:15	**Invited talk: Tomasz Sowiński (Institute of Physics, Polish Academy of Sciences, Poland):** *Theoretical untangling of photon entanglement detection in positronium annihilation processes*
11:15 - 11:40	**Invited talk: Sebastiano Mariazzi (University of Trento, Italy):** *Preliminary tests of positronium gathering in microcavities connected to nanochannels*
11:40 - 12:05	**Invited talk: Milena Piotrowska (Jan Kochanowski University, Poland):** *Para-positronium and beyond: probing two-photon annihilation in bound states*
12:05 - 12:20	**Magdelena Allen (MIT, MGH Martinos Center, USA):** *Constraining CP Violation in Ortho-Positronium Decays at 7 Tesla with NeuroSphere PET Modules*
12:20 – 12:30	**Neha Chug (Jagiellonian University, Poland):** *New precision limits on CPT symmetry test in positronium with J-PET*
12:30 – 12:40	**Deepak Kumar (Jagiellonian University, Poland):** *Measuring the degree of entanglement in matter using a plastic-scintillator based PET scanner*
12:40 - 13:50	***Lunch break***

Radiotherapy monitoring	Chair: Tomasz Matulewicz
13:50 – 14:15	**Invited talk: Marta Opalińska (University Hospital in Krakow, Poland):** *Personalization of radioligand therapy through dosimetry: Clinical opportunities and challenges*
14:15 - 14:40	**Invited talk: Bram Carlier (KU Lueven, Belgium):** *In vivo radiation sensing using phase-change ultrasound contrast agents*
14:40 - 15:05	**Invited talk: Narendra Rathod (University of Bern, Switzerland):** *High-Resolution Intravital Imaging: Novel On-Chip PET and iQID Camera for Personalized Radiopharmaceutical Therapy and Microdosimetry*
15:05 - 15:20	**Szymon Niedzwiecki (Jagiellonian University, Poland):** *Range Monitoring in Proton Therapy Using the J-PET Scanner: First Experimental Insights*
15:20 - 15:50	***Coffee break***
Nuclear/particle studies	Chair: Alessio Porcelli
15:50 – 16:15	**Invited talk: Rudrajyoti Palit (Tata Institute of Fundamental Research, India):** *Probing nuclear structure using lifetime measurements*
16:15 – 16:40	**Invited talk: Luca Povolo (LHEP - University of Bern, Switzerland):** *Cold Neutron Interferometry for Fundamental Physics Experiments*
16:40 – 17:05	**Invited talk: Udai Singh (DESY, Germany):** *Scientific Computing: Remote Access, CNN Segmentation, and SARS-CoV-2 Dynamics*
17:05 -17:25	**Closing**

Posters

1	Kriti Awasthi	Fluorescence-Guided Analysis of EV Behavior in 3D Breast Cancer Spheroids: Toward PET-Compatible Theranostics
2	Ermias Beyene	Developing efficiency maps for double isotope studies with J-PET
3	Philippe Clement	Graph-based event reconstruction for segmented detectors: SiFi-CM case study
4	Juan Fransisco Gonzalez	Characterization of new SiC detectors for further experiments with exotic nuclei at barrier energies
5	Neha Gupta	Characterization of optical photon transport in Long Plastic Scintillators
6	Sharareh Jalali	Study of Total-Body J-PET sensitivity as a function of the Ring Number
7	Jakub Hajduga	Automated Simulation Workflow for 3D-Printed Scintillator Phantoms in Radiotherapy Planning
8	Mateusz Kaczmarek	First Laboratory Tests of the SABAT Project Sensor with a D-T Neutron Generator
9	Tevfik Kaplanoglu	Design and construction of Cross-Staged Gantry System of Total-Body J-PET/CT Scanner for Motion Artifact Free anatomic and metabolic imaging
10	Łukasz Kapłon	Optical properties and time-of-flight resolution of plastic scintillators for total-body J-PET scanner
11	Kamila Kasperska	Studies of the absorption parameter 3γ/2γ in positronium decays
12	Michalina Kazimierczak	Normalisation Strategies in ToF-SIMS Analysis of Liver Tissue - Critical Impact on Comparative Molecular Profiling in a Diabetic Rat Model
13	Monika Kercz	Can decay gammas from radioactive ion beams enhance prompt gamma imaging?
14	Aleksander Khreptak	Titanium–Scandium Radionuclide Generator: A New Approach for Sustainable Isotope Production
15	Magdalena Kołodziej	MERMAID – prototype PET scanner for small aquatic animals
16	Aafke Kraan	Usage of DL-based portal dose images for treatment error detection with transit dosimetry in radiotherapy
17	Karol Kubat	Ex-Vivo Positronium Lifetime Imaging with ^{44}Sc Using J-PET Scanner
18	Justyna Mędrala-Sowa	Mirror matter: towards precise measurement of ortho-positronium lifetime
19	Simbarashe Moyo	Quantification of Nanoscale Free Volumes in Human Plasma Clots Using Positron Annihilation Lifetime Spectroscopy
20	Wiktor Mryka	Towards feasibility study of Positronium yield in proton beam therapy
21	Koki Nakamura	Enhancement of Biological PET Imaging via Quantum Entanglement using GAGG-SiPM pixel ring detectors
22	Anand Pandey	Towards the development of an iterative algorithm for positronium lifetime imaging using ^{44}Sc with the modular J-PET

23	Piyush Pandey	Feasibility study of Antihydrogen vertex imaging using the modular J-PET
24	Maciej Słotwiński	Extracellular Vesicles and How to Find Them
25	Pooja Tanty	Towards Charge conjugation symmetry test in Electromagnetic Interaction using J-PET
26	Keyvan Tayefi Ardebili	SiPM Performance Characterization for Total-Body J-PET: Hamamatsu vs. Onsemi
27	Satyam Tiwari	A Feasibility Study of Using Detector-Scattered Photons for Attenuation Map Generation in J-PET Scanner
28	Kavya Valsan Eliyan	Developing analysis criteria for studies of CP symmetry with photons From o-Ps decay and Compton scattering with the Modular J-PET Detector
29	Wiktor Zantowicz	Time-Based Separation of Scattering and Capture Processes in NAA Based on Monte Carlo Simulations in Geant4 toolkit