



# 3rd International Workshop on Machine Learning and Quantum Computing Applications in Medicine and Physics

## Wednesday 09 September 2026

### Medical imaging: Monte Carlo simulations in medical imaging (09:00-10:30)

time	[id] title	presenter
09:00	[62] AI meets physics - an overview of AI applications in the context of Monte Carlo particle transport simulations	Dr KRAH, Nils
09:40	[14] GGEMS - GPU Geant4-based Monte Carlo Simulations	BENOIT, Didier
10:05	[12] Up-scaling for measuring the spatial distribution of radiation dose for applications in the preparation of individual patient treatment plans	RACHWAŁ, Bartłomiej

### Medical imaging: Novel reconstruction algorithms and techniques (14:50-16:30)

time	[id] title	presenter
14:50	[32] Advanced TOF MLEM reconstruction of a human patient scanned by the modular J-PET	SHOPA, Roman
15:15	[51] Improvement of time-of-flight resolution of PET scanner using additional prompt photon	RACZYŃSKI, Lech
15:40	[60] Towards total-body J-PET: overview of data correction techniques for image reconstruction	COUSSAT, Aurélien
16:05	[13] Assessment of Internal Radiation Dose: Understanding the Influence of Respiratory Motion	Dr ATI, Moncef