Fast Timing in Medical Imaging

Friday, 3 June 2022

Technologies for ≤100ps TOFPET resolution: Scintillators (17:45 - 18:00)

-Conveners: Paul Rene Michel Lecoq

time	[id] title	presenter
17:45	[78] Nanophotonic particle detectors: how quantum optics can contribute to scintillators and Cherenkov detectors	KAMINER, Ido

Saturday, 4 June 2022

Technologies for ≤100ps TOFPET resolution: Scintillators (08:30 - 10:15)

-Conveners: Etiennette Auffray Hillemanns

time	[id] title	presenter
08:30	[7] Recent developments in the field of scintillator for fast radiation detectors	AUFFRAY HILLEMANNS, Etiennette
08:45	[47] Timing limits and estimators in the presence of prompt photons in TOF-PET detectors	Mr LOIGNON-HOULE, Francis
09:00	[2] Scintillator response time probed at femtosecond photoexcitation	Prof. TAMULAITIS, Gintautas
09:15	[36] Optically stimulated luminescence in state-of-the-art LYSO:Ce scintillators	MARTINEZ TURTOS, Rosana
09:30	[14] Characterization of a semi-monolithic detector with DOI and TOF capabilities for preclinical PET	BARRIO, John
09:45	[67] A Comprehensive Study on the Timing Limits Using High Light Yield Crystals and High-frequency Front-end Circuit for TOF PET Detectors	YI, Minseok
10:00	[32] Defect process in BGO: A precursor to band-edge engineering and design of stable scintillators	BOUHALI, Othmane

Technologies for ≤100ps TOFPET resolution: Scintillators (10:45 - 12:00)

-Conveners: Rosana Martinez Turtos

time	[id] title	presenter
10:45	[6] A proof-of-concept of cross-luminescent metascintillators	KONSTANTINOU, Georgios
11:00	[79] A Study of Mass Production of Metacrystal Pixels and Arrays	CHAI, Bruce
11:15	[10] Exploiting Cherenkov radiation and cross-luminescence emission with BGO/BaF2 metacrystals	LATELLA, Riccardo
11:30	[71] GATE optical simulations of DOI enabled metascintillator based on semi-monolithic design	ZHANG, Lei
11:45	[39] Toward a new generation of detectors for TOF-PET with heterostructured scintillators	PAGANO, Fiammetta

Technologies for ≤100ps TOFPET resolution: Scintillators (12:00 - 13:45)

-Conveners: Paul Rene Michel Lecoq

time	[id] title	presenter
12:00	[42] Fast timing with nanocrystalline lead halide perovskite thin films on scintillating wafers	MIHÓKOVÁ, Eva
12:15	[41] Extreme γ-ray radiation hardness and high scintillation yield in perovskite nanocrystals	Dr ZAFFALON, Matteo
12:30	[45] Nanocrystals for fast timing applications embedded in a polystyrene matrix	DECKA, Katerina
12:45	[70] Perpendicular photonic devices for scintillation detectors	ZHANG, Lei
13:00	[8] Scintillation mechanisms in II-VI semiconductor nanostructures	MAHLER, Benoit
13:15	[34] Toward Ultrafast Scintillators with Fluorescent Colloidal Nanocrystals	Ms MYSLOVSKA, Alina Prof. MOREELS, Iwan

13:30	[40] GaN-InGaN multiple quantum well (MQW): superfast semiconductor scintillator for time tagging in composite pixels for TOF-PET	NIKL, Martin