Foundations right, future bright

BHPA 2025

Cliniques universitaires SAINT-LUC UCLouvain BRUXELLES

Huni

Clinique SAINT-JEAN

UCLouvain

BHPA 40 SYMPOSIUM

7-8 February
Louvain-La-Neuve

https://symposium.bhpa.eu/

#BHPA2025

Friday 7th February

	Theatre	Foyer Royal	Foyer du Lac	Hocaille
09h00 - 10h30	10' Opening by organising committee *The era of automation in medical physics: right foundations for more secure and easy workflows* 🔵30' ***Automation and Human Performance: Insights from an Aviation Perspective*** - AD Schmitz, EUROCONTROL 🔵30' ***AI in medical physics: foundations that matter*** - A. Dekker, MAASTRO 10' **Automation in Radiation Oncology: We've Taken Off and Are Gaining Altitude**, D. Callens, KULeuven	🔵 INVITED SPEAKERS 🟡 SPONSORED TALK YP YOUNG PHYSICIST		
10h30	**Coffee Break**			
11h00 - 12h30	*Advanced treatment plan optimisation and delivery techniques in RT* 7' SNAP - **Automated Multi-Patient VMAT Prostate Planning Using Fine-Tuning Process Through Dynamic Adjustment of Optimization Parameters**, H. Cavus, Jessa Ziekenhuis 7' SNAP -**The Spine SRS module (Elements TPS, Brainlab) for treatment of spinal metastasis in stereotactic conditions**, V. Baltieri, CHU Charleroi 7' SNAP - **How low can we go?** K. Leysen - AZ Turnhout 10' **First validation/commissioning of the novel RapidArc Dynamic technique for breast radiotherapy**, T. Reynders, UZLeuven 15' **Evaluation of robust planning on the GTV in lung stereotactic body radiation therapy**, N. Piecharski, CHU Liege YP 15' **Reduced time and memory requirements for robust proton therapy planning through a beamlet-free approach,** D. Pross, UCLouvain YP 15' **Fast deliverable proton therapy for lung cancer using 3D-printed range modulators: evaluating beam time efficiency and motion mitigation**, J. Beyers, KU Leuven YP 🟡 10' **RaySearch**	*New applications and developments in radiology* 15' **Modelling image-specific microcalcification clusters for mammographic imaging**, A. Van Camp, KULeuven YP 15' **Dual Roles of Calcification Features in the Mirai Mammographic Breast Cancer Risk Prediction Model: Early Micro-Calcification Detection and Identification of High-risk Calcifications**, Y. Wang, KU Leuven YP 15' **The precision of CT imaging for the evaluation of bone implant migration: a preclinical study on a porcine cadaver model**. M. Acke, VUB YP 15' **Detection of regional ventilation differences in normal and defected in vivo rabbit lungs using dynamic Xenon-gas enhanced DEC shuttle mode imaging**, E. Verelst, VUB YP 15' **Patient-tailored iodine contrast injection optimization in coronary PCCT angiography**, T. Busselot, UZLeuvenYP 🟡 10' **Telemis**	🔵 **30' Quantitative SPECT/CT Imaging: The Foundation for Accurate Internal Dosimetry** - Johannes Tran-Gia, University Hospital Würzburg 15' **Scatter compensation for dynamic brain PET using very fast Monte Carlo simulation**, S. Noë, KULeuven YP 15' **Alphavision: 12 points go to… Astatine-211**, L. Raes, UZBrussel YP 15' **Energy-based scatter correction in PET, accounting for the position dependent energy spectrum of the true coincidences**, S. Zaman Pour, KULeuven YP 15' **CT-free attenuation correction method for dedicated cardiac pinhole CZT system: a phantom study,** M. Hesse, UCLouvain	45' **QMs and MPEs – partners or rivals ?** - Survey results and discussion 15' **Findings from a longitudinal Study: What is the optimal strategy for PREM-assessment in Radiation Oncology?**, C. Benazzouz, UZ Leuven 15' **Report and Analysis of a Major IT Breakdown Affecting a Hospital and its Radiotherapy Department**, S. Gabriel, CHU UCL Namur 15' **RaySwitch: a project to implement RayCare and RayStation as a new OIS,** K. Snijders, Iridium Netwerk
12h30	**Lunch**			
13h30 - 15h30	*Dosimetry and dose calculation* 🔵30' **Unraveling Dosimetric Loose Ends: From Foundations to Clinical Impact** - Nick Reynarts, Institut Jules Bordet 7' SNAP - **Absolute calibration of monitor unit chambers: A 10-year analysis for six Elekta linacs**, M. Mathot, CHU Liege 7' SNAP - **Multi-institutional study on CT number variation using DirectDensity reconstruction**, M. Burghelea, Bordet 10' **Temporal drift in the calibration of Ir-192 brachytherapy sources: A BRAPHYQS multi-centre analysis**, M. Brabandere, UZLeuven 10' **Validation of Acuros v18 model with Primo Monte Carlo code**, L. Pellegri, CHU Tivoli 15' **Optimizing the modeling of the Elekta Agility MLC of the CHU of Liege in Raystation 12A**, F. Tchelong Kwayeb, CHU Liege YP 15' **Dosimetric Characterization of a New Optically Stimulated Luminescence Film in Particle Beams**, M. Caprioli, UZLeuven YP 15' **Real-time assessment of ion recombination correction and dose rate using a dual-gap ionization chamber**, M Orts, UCLouvain YP 🟡 10' **PEO Medical**	*Daily MPE tasks: Dosimetry and optimisation* 🔵 30' **Dose monitoring systems: Challenges and perils of dose monitoring systems in radiology** - J. Binst, UZ Leuven 15' **First Belgian local diagnostic reference level for paediatric whole-body and brain 18F-FDG PET/CT,** T. Assoignon, UCLouvainYP 15' **Effective dose conversion factors for adult and pediatric patients in dual energy extremity, dento-maxillofacial and ENT CBCT imaging**, K. Merken, UZLeuven 15' **An investigation of the dose of CT scout views**, D. Hee, UZBrusselYP 15' **Validation of OpenMC, a Python Monte Carlo particle transport code, for patient dosimetry in conventional radiology**, J. Dabin, SCKCEN 15' **Variations in participant positioning, scan direction and scanogram angle influence organ-specific radiation doses in routine low-dose chest CT for lung cancer screening,** L. D'hondt, UGentYP 15' **Image Quality in lung cancer screening LDCT: comparing the NELSON trial to current conventional and photon-counting thoracic CT**, K. Torfs, KULeuvenYP	🔵 XX' **Recent updates in the regulatory framework regarding medical radionuclides.** - M. Vandecapelle, FANC 🔵 XX' **Radioactive release from hospitals in the environment** - J. Vives – SCK CEN 🔵 XX' **Radiation protection aspects when introducing new radiopharma in the hospital** - Y. D'Asseler, UZ Gent 15' **How much do 68Ga-, 177Lu- and 131I-based radiopharmaceuticals contribute to the global radiation exposure of nuclear medicine staff?**, L. Struelens, SCKCEN 15' **Microscopic analysis of attenuating layers in personal radiation protective equipment (PRPE): evaluation of material composition and influence of exposure to cleaning agents**, S. .Bayart, UGent YP BVS-ABR meeting - part I	QMRT.be meeting
15h30	**Coffee Break**			
16h00	General Assembly		BVS-ABR meeting - part II	
18h00	**Social Event**			

	Saturday 8th February			
	Theatre	**Foyer Royal**	**Foyer du Lac**	**Hocaille**
9h00 - 09h30	🔵 30' **Getting right foundations for reirradiation: what medical physics can do to ensure safe and robust dose planning and evaluation** - Ane Appelt, University of Leeds			
9h30 - 10h30	*Improving and modeling outcomes* 15' **Cumulative doses in radiotherapy treatment of brain cancer and lymphoma**, J. Rutten, UGent YP 15' **Development of a probabilistic model for metastatic lymphatic progression in early-stage breast cancer,** Z. Smine, Bordet YP 15' **The impact of a probabilistic definition of the target volume and radiobiological optimization on complication probabilities in proton therapy,** E. Peeters, UCLouvain YP 15' **Machine-Specific Fetal Dose Assessment in Proton Therapy for Breast Cancer During Pregnancy**, J. Hohmann, KULeuven YP		🔵 30' **Metrology: Providing a firm foundation for Nuclear Medicine** - Andrew Fenwick, NPL 15' **Cross-calibration of a dose calibrator and a gamma counter for Gallium-68 and Fluor-18 activity measurements,** T. Assoignon, UCLouvain YP 15' **Independent verification of activity determination for radiopharmaceutical preparations in nuclear medicine**, K. Baete, UZLeuven	« CHIMP » meeting
10h30 - 11h00	**Coffee Break**			
11h00 - 12h30	*Tools and Methods for Adaptive Therapy* 15' **Intentional deep overfit learning to bypass treatment plan optimization in adaptive radiotherapy for lung cancer IMRT**, L. Vandenbroucke, KULeuven YP 15' **Real-time adaptive proton therapy with a beamlet-free optimizer**, V. Dormal, UCLouvain YP 15' **Deformable Image Registration for contour propagation for Head and Neck adaptive radiotherapy**, I. RHIMI, Bordet / Hospital Portes Provence YP 10' **Evaluation of delivered dose and correlation with toxicities for radiotherapy of head and neck cancers, E. Gnacadja**, Bordet / IBA 10' **Dosimetric impact of delivering beams lateral first vs. clockwise order for prostate SABR with 1.5T MR-Linac**, A. Gulyban, Bordet 7' SNAP - **Bone bulk density based on classical, Direct Density and synthetic CT for prostate MR guided SBRT: Is there a relevant dosimetric impact?**, A. Gulyban, Bordet 🟡10' **Siemens**	*Daily MPE tasks: Quality controls and optimisation* 🔵 30' **Adaptation of classic QC test for testing on new CNR-optimized fluoroscopy systems** - M. Dehairs, Institut J.Bordet 15' **Optimization in paediatric CT: the power of protocol management**, J. Binst, UZLeuven 15' **In-depth acceptance testing of six mobile digital radiography systems for bedside x-ray imaging**, N. Marshall, UZLeuven 15' **A workflow to harmonize CT abdomen protocols beyond dose equalization**, J. Vignero, UZLeuven 15' **Pitfalls in quality control testing of contrast-enhanced mammography**, K. Houbrechts, UZLeuven YP	NUCLEAR MEDICINE Parallel meeting for Nuclear medicine professionals *Program to be confirmed*	RT24 meeting
12h30 - 13h30	**Lunch**			
13h30 - 15h00	🔵Closing debate: "***Protect the individual patient or improve the well-being of the population: must we choose?***" Steve Ebdon-Jackson, formerly at Health Protection Agency UK Ricard Martinez, University of Valencia Wim Pinxten, University of Hasselt			
15h00 - 15h30	**Coffee Break**			
15h30 - 16h00	Awards and closing			