Irish Association Of Physicists In Medicine

13TH ANNUAL SCIENTIFIC MEETING

Cork International Hotel

SCIENTIFIC PROGRAM – SATURDAY, 20 APRIL 2024

8:00	***Registration – Main Foyer***	

PLENARY SESSION
INTERNATIONAL BALLROOM

8:30 – 10:45	President's Welcome	Dr Emer Kenny
	GUEST LECTURE	Dr Ausrele Kesminiene, Principal Investigator EPI-CT study
	GUEST LECTURE	Prof Carmel Moran, Professor of Translational Ultrasound imaging, University of Edinburgh
	IMPLEMENTING AI IN THE CLINIC – AN IRISH EXPERIENCE	
	Predicting change: Utilizing AI Auto-Segmentation for treatment monitoring in Radiotherapy for H&N Cancer	Ciaran Malone
	Reducing MRI acquisition time using AI reconstruction: assessment of acceleration approaches using objective image quality metrics	Ainur Kazhybekova
	Novel Occupational Exposure Measurement via Passive Tracking	Szymon Borkowski

10:45	***Coffee Break***	

DIAGNOSTIC PARALLEL SESSION
INTERNATIONAL BALLROOM

11:10 – 12:40	Customized Benchmarks for Breast Dose Comparison	Gillian Power
	Reflections on a radionuclide therapy risk assessment - predictions versus reality	Ann McCann
	Initial experience of Contrast-to-noise ratio driven exposure control for neuroradiology applications.	Ruth Bridcut

	Examining the quantification accuracy of 18F-fluorodeoxyglucose (FDG) uptake of atherosclerotic plaques in PET/CT imaging using phantom studies	Rebeka Öcsi
	Practical implementation of Harmonisation and Scaling in Digital PET Optimisation	Hannah O'Driscoll
	Investigating the suitability of using the TO PAN phantom in OPG QA	Anna-May Woods

RADIOTHERAPY PARALLEL SESSION

VALENCIA - VERONA

11:10 – 12:40	Biologically Effective Dose (BED) Calculator for Re-Treatment Evaluation	Eoin Fallon
	Intrafraction motion in surface-guided breast radiotherapy, and its implications on a single PTV margin strategy	Ciaran Malone
	Investigating BED Conversion in Re-irradiation cases using Velocity	Oran McElligott
	A retrospective evaluation of HDR cervical brachytherapy treatments based on the EMBRACE II planning aims	Lisa Rebello
	Implementation of MVision Contour + Guideline Based AI Segmentation (GBS) at Cork University Hospital (CUH)	Michael Roche
	Comparing the setup accuracy of Brainlab Thermoplastic Masks for Head Immobilisation Effectiveness in Stereotactic Radiosurgery	Irish Apale

12:40 ***Lunch***

POSTER PRESENTATION SESSION

INTERNATIONAL BALLROOM

AFTERNOON SESSION

INTERNATIONAL BALLROOM

	GUEST LECTURE	Dr Kelly Paradis, Associate Professor of Medical Physics and the Associate Chair of Equity and Wellness at Michigan Medicine
13:40 – 15:10	**XIEL BURSARY** *Open to IAPM trainee/student member or member with < 2 years' experience. This year's theme: "Advances of science in medical physics that directly benefit the patient pathway".*	
	An Investigation into the Effect of Ring Snaking in the Varian 3D Interstitial Ring Applicator on Dose to the Clinical Target Volume and Organs at Risk	Amey Bermingham
	Clinical Data Analytics: Characterization and Compensation of Motion Artifacts in Ambulatory Near-Infrared Spectroscopy Measurements (NIRS)	Rayne Pericica
	Inorganic Scintillator-Based Optical Fibre Dosimetry for UHDR Electron Beams on a FLASH-enabled linac	Lucy Griffiths
	Practical implementation of Harmonisation and Scaling in Digital PET Optimisation	Hannah O'Driscoll
	Validation of deformable image registration for dose deformation in head and neck region	Robert Nolan
	EARLY STAGE RESEARCH AWARD (FORMALLY YIG)	
	Introduction to the Early Stage Research Award (Formally YIG)	Dr Seán Cournane
	Young Investigator Grantee 2023	Saoirse Maher
	Announcement of the Early Stage Research Award 2024	Dr Seán Cournane

15:10	***Coffee Break***

JOINT SESSION

INTERNATIONAL BALLROOM

15:30 – 16:45	Developing a National approach for patients undergoing re-irradiation: A status report by the Re-irradiation Subcommittee of the IAPM RT-SIG	Paul Hill
	Clinical Data Analytics: Characterization and Compensation of Motion Artifacts in Ambulatory Near-Infrared Spectroscopy Measurements (NIRS)	Rayne Pericica
	Python based occupational dosimetry reporting and communication system – PyRP	Darragh McCague
	Driving continuous improvement in an External Services Medical Physics group with the ISO9001:2015 Quality Management System	Michael Rowan
	Developing safety policies for MRI scanning of implanted medical devices	Michael Kelly

16:45	***Close of Meeting***