

## Refresher Programme at a glance

Thursday 18 August 2022				
Timetable	Room1	Room2	Room3	Room4
08:00-9:00	<b>Refresher Course RT</b> Open Source TPS Software for Radiotherapy Research, Developments and Use in Medical Physics	<b>Refresher Course NM</b> Improvement in the time resolution of TOF and the use of SiPM. - Technological advances in SPECT and PET	<b>Refresher Course DIR</b> Photon counting CT (PCCT) -State of the art and specific QC tasks for the medical physicist	<b>Refresher Course MESPf</b> Technology Underlying CBCT and the challenges in dosimetry for CBCT; CBCT in Diagnostic Modalities and the Role of CBCT in RT
Friday 19 August 2022				
Timetable	Room1	Room2	Room3	Room4
08:00-9:00	<b>Refresher Course RT</b> Monte Carlo for Radiation therapy and Clinical Applications	<b>Refresher Course NM</b> Radioprotection optimization in radionuclide therapy. - Waste management and errors in administration.	<b>Refresher Course DIR</b> Fundamentals of AI / AI across medical physics	<b>Professional Focus Session</b> Education, Training and Registration of Medical Physics Experts in Europe: Now and in the Future
Saturday 20 August 2022				
Timetable	Room1	Room2	Room3	Room4
08:00-9:00	<b>Refresher Course RT</b> Particle Therapy: Protons and Carbon Ions	<b>Special Focus Session</b> <span style="color: green;">Green Physics</span>	<b>Refresher Course DIR</b> MRI. Very low and very high field MRI	<b>Refresher Course MESPf</b> Foetal Exposure for External Radiation in Diagnostic Imaging and Dose Estimation from Administration of Radionuclides. Exposure Levels. Dosimetry and Implications

## ECMP 2022 Refresher Course Detailed Programme

Thursday 18 August 2022				
Session	Refresher Course	Refresher Course	Refresher Course	Refresher Course
Session Title	Radiotherapy: Open Source Software for Radiotherapy Physics Research	Nuclear Medicine: Diagnostic Nuclear Medicine	Diagnostic and interventional radiology: Two scoops of CT: Photon counting CT (PCCT) and CT interventional procedures-State of the art and specific QC tasks for the medical physicist	Multiple Energies Single Patient Focus: New Technologies
Chair	Conor McGarry; Northern Ireland	Irene Polycarpou; Cyprus	Irene Hernandez-Giron; The Netherlands	Maria San Merce; Switzerland
8.00-9.00	Niklas Wahl; DKFZ, Germany / MATRAD - an Open Source TPS Software for Radiotherapy Research	Antonio Gonzalez, CSIC (Spanish National Research Council), Improvement in the time resolution of TOF and the use of SiPM	Marc Kachelriess, DKFZ, Germany / Basics of Photon counting	Osvaldo Rampado; Technology Underlying CBCT and the challenges in dosimetry for CBCT
	Jakob Ödén; Karolinska Institutet, Sweden / Open source scripting in modern TPS	Stefaan Vandenberghe; Ghent University Institute of Biomedical engineering and technology ,Belgium / Technological advances in SPECT and PET	Marcel van Straten; Erasmus Medical Centre, The Netherlands / Acceptance and QC of PCCT systems	Aoife Gallagher, University Hospital Limerick, Ireland / CBCT in Diagnostic Modalities and the Role of CBCT in RT
Friday 19 August 2022				
Session	Refresher Course	Refresher Course	Refresher Course	Professional Focus Session
Session Title	Radiotherapy: MC use in radiation therapy: from research tool to clinical application	Nuclear Medicine: Molecular Radiotherapy	Diagnostic and interventional radiology: Artificial Intelligence	Education, Training and Registration of MPE in Europe: Now and in the Future

Chair	Brendan McClean; Dublin	Roberta Matheoud; Italy	Leonard Wee; The Netherlands	Paddy Gilligan; Mater Misericordiae University Hospital, Ireland
8.00-9.00	Michael Fix; Inselspital – University of Bern, Switzerland / Monte Carlo for Radiation therapy	Ana Millan; Technicas Radiofisicas S.L.,Spain / Radioprotection optimization in radionuclide therapy	Carlotta Masciocchi; Gemelli Generator-Università Cattolica del Sacro Cuore, Italy / Fundamentals of Artificial Intelligence	Brenda Byrne; Mater Misericordiae University Hospital, Ireland / EFOMP MPE status and the road to no borders across our profession
	Antonio Lead Plaza; University of Seville, Spain / Monte Carlo tools for clinical applications	Mario Marengo; University of Bologna, Italy / Waste management and errors in administration	Issam el Naqa; Moffit Cancer Institute, USA / Artificial Intelligence across Medical Physics	Olivier Lanoo EU Commission DG Grow /Professional mobility & Common Training Frameworks under the Professional Qualifications Directive (Directive 2005/36/EC) (Virtual Presentation)
<b>Saturday 20 August 2022</b>				
Session	Refresher Course	Special Focus Session	Refresher Course	Refresher Course
Session Title	Radiotherapy: Particles Therapy	Emerging themes and technologies in medical physics special focus session: Green Physicist	Diagnostic and interventional radiology: Very low and very high field MRI	Multiple Energies Single Patient Focus: Foetal Exposure in Diagnostic Imaging
Chair	Joao Seco; Germany	Emer Kenny; Ireland	Andrew Webb; The Netherlands	Geraldine O'Reilly; Ireland
8.00-9.00	Stefan Both; Groningen University Medical Centre, The Netherlands / Protons in Clinical Practice	Rob Chuter, The Christie NHS Foundation Trust, UK / Medical Physics and the Climate Crisis	Karin Markenroth Bloch; Lund University Bioimaging Center, Sweden / Very high field MRI	Natalia Saltybaeva; University of Zurich, Switzerland / Foetal Exposure for External Radiation in Diagnostic Imaging. Exposure Levels. Dosimetry and Implications
	Oliver Jäkel; DKFZ, Germany / Carbon Ions in Clinical Practice	Holger Wirtz; Lake of Constance Radiation-Oncology Center, Germany / Solar powered radiotherapy : a global solution for high income countries and an opportunity for low and middle income countries too	Najat Salameh; University of Basel, Switzerland / Very low field MRI	Sigrid Leide-Svegborn; Lund University, Sweden / Foetal Dose Estimation from Administration of Radionuclides. Exposure Levels. Dosimetry and Implications