



SCIENCE,
TECHNOLOGY
& ENGINEERING
FORUM

BEYOND BOUNDARIES

COLLABORATING FOR TOMORROW'S INNOVATIVE SOLUTIONS



Wednesday 9th – Thursday 10th October 2024

Central Hall Westminster, London

Programme



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Day One Programme

Wednesday 9th October 2024

*details subject to change

Day One Programme 1/2

09:00		Registration/Exhibitions
09:30	Session 1	Welcoming Address, Dr. Anna Barnes, IPEM President
09:45		Woolmer Lecture: Professor Wendy Tindale OBE, Sheffield Teaching Hospitals NHS Foundation Trust
10:30		Keynote: David Lawson, Department of Health and Social Care "Forward look, opportunities and challenges for Medical Technology"
11:00	Break	Coffee, Networking & exhibitors
11:30	Session 2	"Our survey says: AI - friend, foe or frenemy?" - Dr Paul Doolan, German Oncology Centre
		Industry Q&A panel on AI in healthcare
13:00	Break	Lunch , Networking & exhibitors



		Breakout 1 - AI & Machine Learning	Breakout 2 - Sustainability
14:15	Session 3	Clinical Decision support for falls management: a machine learning approach	Developing a framework for improving environmental sustainability in Radiotherapy
		<i>Dr Ciaran Finucane, Mercer's Institute for Successful Ageing, St. James's Hospital</i>	<i>Dr Robert Chuter, The Christie NHS Foundation Trust</i>
		Increased Patient Throughput via Implementation of Artificial Intelligence in Diagnostic MRI	Initial estimate of the carbon footprint of UK proton therapy services
		<i>Asher Ezekiel, The Christie NHS Foundation Trust</i>	<i>Dr Mark Hardy, The Clatterbridge Cancer Centre NHS Foundation Trust</i>
		How to Implement AI into Breast Screening	First estimate of the carbon footprint of PET imaging
		<i>Dr Roger Staff, NHS Grampian</i>	<i>Gerry Lowe, Mount Vernon Hospital</i>
		Developing a practical local framework for responsible AI deployment,	Results of an environmental sustainability survey of radiotherapy professionals: a UK physicist sub analysis
		<i>Eleanor Hesketh, Sheffield Teaching Hospitals NHS Foundation Trust</i>	<i>Rachel Allcock, University Hospitals Coventry and Warwickshire NHS Trust</i>
		The use of deep-learning convolutional neural networks (CNN) for auto-classification of digital histology slides of uveal melanoma	
		<i>Professor Azzam Taktak, University Hospitals Bristol and Weston NHS Foundation Trust</i>	
	Roberts Prize Winner for best paper in Physics in Medicine and Biology: How deep learning techniques can improve the detector performances in TOF-PET		
	<i>Fiammetta Pagano, CERN - European Council for Nuclear Research</i>		
15:45	Break	Coffee, Networking & exhibitors	
16:15	Session 4	John Mallard Lecture: Professor Katia Parodi, Ludwif Maximilian University	
17:00			
17:30			
18:00	Session 5	Industry Showcase & Celebration Reception	
		<i>Sponsored by UKAS</i>	



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Day Two Programme

Thursday 10th October 2024

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08:00	Session 1A	Workshop1: "How to get published" workshop facilitated by the Institute of Physics Publishing			
		Workshop 2: Pathway to Success: Expert Strategies for HSST IAPS Preparation: IPEM Training Team & Professor Andrew Reilly, NHS Greater Glasgow & Clyde			
		Workshop 3: Mastering the Art of Grant Writing: Unlocking Funding Success: George Bruce, NHS Greater Glasgow & Clyde & Dr Mohammad Al-Amri, Cardiff University			
08:45	Break	Coffee, Networking & exhibitors			
09:00	Session 2	<i>Breakout 1 - Workforce & Skills</i>	<i>Breakout 2 - Sustainability</i>	<i>Breakout 3 - Ethical Healthcare</i>	
		Effective training of the workforce for online adaptive radiotherapy, with particular reference to a career development path for Dosimetrists	Initial estimate of the carbon footprint of Brachytherapy in the UK,	Effectively MR Conditional cardiac implantable electronic devices,	
		<i>Nicky Whilde, Mid and South Essex Foundation Trust</i>	<i>Amanda Tate, Nottingham University Hospitals</i>	<i>Dr James Harkin, The Christie NHS Foundation Trust</i>	
		IPEM Innovation Gold Medal 2023 winner: "My Story"	Single departmental experience of implementing the "Greener NHS" sustainability ambitions,	Smart belt design for monitoring falls, posture and basic physiological parameters in the community,	
		<i>Dr Darren Hart , Royal United Hospitals Bath NHS Foundation Trust</i>	<i>Gerry Lowe, Mount Vernon Cancer Centre</i>	<i>Professor Azzam Taktak, University Hospitals Bristol and Weston NHS Foundation Trust</i>	
		Panel session: "Expanding Horizons: Exploring Career Diversity in Medical Physics and Clinical Engineering"	Industry session: AXREM - Supporting the NHS Net Zero ambition, Chris Taylor, Sustainability Champion at Philips Healthcare	Rebuilding a Clinical Engineering department	
				Dr Marcus Durand, Royal Berkshire NHS Foundation Trust	
				We need to fix the basics; exploring the experiences of disabled patients and staff in the NHS,	
				<i>Helen Chamberlain, National Institute for Health and Care Excellence</i>	
				Martin Black Prize Winner - "Towards accurate wearable data for clinical decision making"	
<i>Dr Peter Charlton, University of Cambridge</i>					
Honorary Fellow - "From Experience to Innovation: Four Ethical Pillars in Radiotherapy Accessory Design for Breast Cancer Care."					
<i>Prof. Heidi Probst, Sheffield Hallam University</i>					
10:30	Break	Coffee, Networking & exhibitors			

11:00	Session 3	<i>IPEM President's symposium</i>				
		<i>Chair: Dr Anna Barnes, IPEM President</i>				
		Keynote: Professor Thomas "Rock" Mackie				
12:30	Break	Lunch , Networking & exhibitors				
13:30	Session 4	<i>Breakout 1 - Workforce & Skills</i>	<i>Breakout 2 - AI & ML/CE</i>	<i>Breakout 3 - Workforce and Skills</i>		
		Development of a Level 4 Apprenticeship in Medical Physics <i>Clare Anderson, NHSE, EoE</i>	Panel Discussion: AI Revolution: Transforming the Future of Clinical Engineering	"Precision and Innovation: The Role of Metrology in Advancing Medical Physics"		
		Development of a national community of practice for medical physics practice educators, <i>Dr Sarah Peel, Guy's and St Thomas' NHS Foundation Trust</i>			Chair Dr Victoria Kidgell, Clinical Engineering Special Interest Group Chair/ Sheffield Teaching Hospital.	
		'Back to Basics' Patient Safety Staff Virtual Reality Training <i>Dr Darren Hart, Royal United Hospitals Bath NHS Foundation Trust</i>	Strategy Launch: Tackling Challenges in Clinical Engineering	Selection of presentations from National Physical Laboratory		
		Upskilling MR radiographers with physics led, simulator-based training <i>Guy Drabble, The Christie NHS Foundation Trust</i>				
		The Success of the Clinical Engineering Internship Programme at the Royal Berkshire Foundation Trust <i>Maria Benedicta-Edwards, Royal Berkshire NHS Foundation Trust</i>				
		The application of computer simulation for Physicist clinical experiential training: experience gained at NPL <i>Professor Andy Beavis, Hull University Teaching Hospitals NHS Trust</i>	Panel session: "Personal insights from Women in Research"			
		15:00	Break	Coffee, Networking & exhibitors		
		15:30	Session 5	Keynote: Professor Dame Margaret Whitehead, University of Liverpool		
Moving Beyond Boundaries - what's next?						
<i>Dr Mark Knight IPEM President Elect & Claire Sharpe, Deputy CEO</i>						
16:30		Thank you & Safe Travels				