

Joint Department of Physics
The Royal Marsden NHS Trust and Institute of Cancer Research
Medical Imaging Physics - Diagnostic Radiology and CT, 12– 14 February 2025

Wednesday 12 February 2025 – Diagnostic radiology physics toolkit; design of imaging systems

08.40 - 08.55		<i>Coffee and Registration</i>
08.55 - 09.00	Jamie Dormand	Course introduction
09.00 - 09.50	Louise Giansante	Design of the digital x-ray unit
09.50 - 10.30	Louise Giansante	Design of the digital mammography unit
10.30 - 10.50		<i>Coffee</i>
10:50 - 12:00	Sue Edyvean	The multi-slice CT scanner
12.00 - 13:00	Louise Giansante	Patient dosimetry techniques
13.00 - 14.00		<i>Lunch</i>
14.00 - 15.00	Elly Castellano	Reconstruction in CT
15.00 - 15.20	Ed McDonagh	Digital image processing and presentation
15.20 - 15.40		<i>Tea</i>
15.40 - 16.20	Ed McDonagh	PACS, DICOM and displays
16:20 - 17:20	Elly Castellano	Image quality assessment

Thursday 13 February 2025 – Performance and testing

09.00 - 10.00	Ed McDonagh	Performance of digital X-ray detectors
10.00 - 11.00	Jamie Dormand	X-ray quality control I
11.00 - 11.20		<i>Coffee</i>
11.20 - 12.00	Jamie Dormand	X-ray quality control II
12.00 - 12.40	Ed McDonagh	Quantitative image quality analysis
12.40 - 13.30		<i>Lunch</i>
13.30 - 14.30	David Platten	Performance of CT imaging systems 1
14.30 - 15.30	David Platten	Performance of CT imaging systems 2
15.30 - 15.50		<i>Tea</i>
15:50 - 16:30	Jamie Dormand	CT quality control
16.30 - 17.10	Louise Giansante	Calculation of Effective Dose

Friday 14 February 2025 – Clinical applications and optimisation

09.00 - 10.00	Laurence King	Digital system design and optimisation in clinical practice
10.00 - 11.00	Dimitra Darambara	Developments in digital detector technology
11.00 - 11.20		<i>Coffee</i>
11.20 - 12.20	Laurence King	Advances in CT in radiology
12.20 - 13.10		<i>Lunch</i>
13.10 - 14.10	Alistair Mackenzie	Advances in x-ray imaging techniques
14.10 - 14.50	David Bernstein	CT in radiotherapy
14.50 - 15.30	Iain Murray	CT in nuclear medicine
15.30 - 15.50		<i>Tea</i>
15:50 - 16:50	Laurence King	CT optimisation in clinical practice
16.50 - 17:00		<i>Close of meeting</i>