



## C5 - Dose and image quality assessment in Computed Tomography

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The bases of computed tomography (CT) dosimetry use measurement methodologies of thirty years old. Beginning with axial to helical mode and more recently with the multislice detectors, these huge transformation on tomography equipment have been changed the way we must evaluate radiation dose to patient and how this affect the image quality.

This course intends to present the new trends of dose measurements, new phantoms for tomography dose, image quality control and the patient radiation dose registry. The standardization required by the American College of Radiology (ACR) Accreditation Programme and the image quality assessment in CT of the International Commission on Radiation Unit (ICRU) Program will be shown.

Following these topics, physical and clinical bases of dual energy CT and cardiac CT exams will be shared and some discussion will take place in a round table at the end of the day course regarding all topics included.

April 17th -Sunday	
8:00 - 9:00 am	Registration
9:00 - 9:15 am	Welcome and Introduction - Paulo R. Costa (moderator)
9:15 - 9:45 am	Methods and Instrumentation of TG-111 - John M. Boone – UC Davies
9:45 - 10:15 am	New Phantoms for CT Dose / Image Quality Assessment [TG-200] - John M. Boone – UC Davies
10:15 - 10:45 am	Break
10:45 - 11:15 am	Radiation Dose Registry for CT - Anthony J. Siebert – UC Davies
11:15 - 11:45 am	CT Dosimetry for the Pediatric Patient [TG-204] - John M. Boone– UC Davies
11:45 - 12:15 am	CT accreditation in the United States: A model program - Anthony J. Siebert– UC Davies
12:15 am - 12:45 pm	Results of a measurement free-in-air dosimetry: IEE/USP experience [TG111] - Denise Y. Nersissian - USP
12:45 - 2:00 pm	Lunch
2:00 - 2:30 pm	Image Quality Assessment in CT: The ICRU Program - John M. Boone – UC Davies
2:30 - 3:00 pm	Bases of Dual Energy CT - Denise Y. Nersissian - USP
3:00 - 3:30 pm	Cardiac CT - Paulo Schwartzman
3:30 - 4:00 pm	Break
4:00 - 4:30 pm	Dosimetry for wide beam angles – Donald Mclean - IAEA
4:30 - 5:00 pm	High dose on Head CT: What had happen e how the USA dealt with that – Cari Borrás
5:00 - 5:30 pm	Discussion and questions – Paulo R. Costa (moderator), Cari, Boone, Siebert