MEDICAL PHYSICS SEMINAR SERIES



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Monday, February 21, 2022 4:00PM (CT) via Webex Scan to Join Meeting:



Quantifying Radiotherapy Dose & FLASH Effects with Optical Signals

Measurement of dose delivery has always been a challenge in radiotherapy, and the invention of advanced treatment planning method combined with extensive linac QA has made this less critical. However, it is still important to be able to quantify dose delivery in complex situations, or when unexpected errors occur. Cherenkov imaging was a technology developed to allow visualization of the beam delivery and has been commercialized into a tool that provides real time images of the beam on the patient. However, this approach does not exactly quantify dose on the patient, and so additional methods such as scintillators can be combined with this to quantify dose to a precision that is clinically useful. The steps towards what could be called non-contact radiation dosimetry will be discussed, and future goals outlined.

FULL DESCRIPTION: medphysics.wisc.edu/seminars/