

Medical Physics Seminar

Monday, January 27, 2020

1325 HSLC ~ 4:00 P.M.

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Modeling Rounded MLC Leaf Ends

Most c-arm treatment delivery systems in use today have MLCs with rounded leaf ends. This talk will explore the benefits of this design and the challenges to accurately model them in a treatment planning system. First, we will discuss machine calibration and performance, as well as MLC properties. Then we will explore MLC transmission functions and their ability to model x-ray beam edges and integrated fluence in light of various approximations. Finally, a process to optimize MLC model parameter values within the RayStation treatment planning system will be outlined.

1325 HEALTH SCIENCES LEARNING CENTER — 4:00 P.M. TO
5:00 P.M.