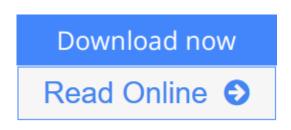


Monte Carlo Techniques in Radiation Therapy (Imaging in Medical Diagnosis and Therapy)

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Modern cancer treatment relies on Monte Carlo simulations to help radiotherapists and clinical physicists better understand and compute radiation dose from imaging devices as well as exploit four-dimensional imaging data. With Monte Carlo-based treatment planning tools now available from commercial vendors, a complete transition to Monte Carlo-based dose calculation methods in radiotherapy could likely take place in the next decade. *Monte Carlo Techniques in Radiation Therapy* explores the use of Monte Carlo methods for modeling various features of internal and external radiation sources, including light ion beams.

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?Medical Physics, 42, August 2015

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About the Author

Joao Seco is an assistant professor of radiation oncology at Harvard Medical School and Massachusetts General Hospital. He earned his PhD from the Institute of Cancer Research, University of London. His research interests range from proton imaging and therapy to photon beam modeling Monte Carlo, electronic portal imaging, and 4D Monte Carlo proton and photon dosimetry.

Frank Verhaegen is head of clinical physics research at the Maastro Clinic. He also holds a professorship at the University of Maastricht. Dr. Verhaegen is a fellow of the Institute of Physics and Engineering in Medicine and the Institute of Physics. He earned his PhD from the University of Ghent. His research interests include imaging and dosimetry for photon and electron therapy, brachytherapy, particle therapy, and small animal radiotherapy.

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