



**DEPARTMENT OF PHYSICS
AND PHYSICAL OCEANOGRAPHY**

**“The Physics of Radiation Oncology and the
Role of the Medical Physicist”**

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Modern radiation oncology is a complex and dynamic practice that heavily relies on the medical physicist. From complex simulation, through treatment planning, treatment delivery, and quality assurance, the medical physicist assures that one of the 3 modalities of cancer therapy remains safe, effective, and patient focused. This seminar will follow the path of the modern radiation oncology patient, from simulation to treatment delivery for multiple treatment modalities and techniques. We will explore the physics behind the machines and softwares that allow physicians and therapists to deliver extremely high doses of radiation conformally to tumors throughout the human body. Additionally, this seminar will show the work that a medical physicist must perform to maintain safety and accuracy of harmful and potentially lethal levels of radiation that must be delivered for both curative and palliative regimens.

**FRIDAY JANUARY 18, 2019
2:00 PM
DELOACH HALL, ROOM 212**

Refreshments will be served

