PHYSICS AND ASTRONOMY
COLLOQUIUM

Dr. Benjamin Fahimian

Stanford University

"Emerging Delivery Techniques for External Beam Radiation Therapy"

Abstract

External beam radiotherapy using linear accelerators utilize the principle of cross-fire to maximize the tumor dose while concurrently minimization normal tissue dose spillage. To further enhance the therapeutic ratio, novel delivery techniques incorporating dynamic modulation of all treatment axes, including treatment couch, have been proposed. To this end, research and development in the emerging technique Trajectory Modulated Arc Therapy will be presented. Through a survey of applications to intracranial and extracranial disease sites, advantages and remaining challenges to the clinical implementation of advanced dynamic delivery techniques will be discussed.

Wednesday, March 1, 2017
3:00 p.m.
Elliott Building
Room 167