

Physics Department Alumni Seminar

Friday November 5th, 2010

12:00 pm in PHSC 108

Modeling Light Propagation in Tissue

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Abstract: Imaging techniques are commonly used to screen for and/or locate cancerous tissue. It is well known that the key to effective treatment of cancer cells is locating them in the early stages of development. Many current imaging techniques are expensive, use transmitted data, and require data from larger areas of the body than the local tissue. My research focuses on modeling the interaction of light with the superficial layers of tissue. The creation of successful reflectance models would open the possibility of using reflectance data for diagnostic work. The use of reflected light allows for less expensive techniques that can be used over smaller surface areas.

