SPEAKER:

John C. Schotland, University of Michigan

TITLE:

Optical Tomography

ABSTRACT:

There is considerable interest in the development of optical methods for biomedical imaging. The physical problem consists of recovering the optical properties of a medium in which light propagates by multiple scattering. This talk will review recent work on related inverse scattering problems for the radiative transport equation and fast image reconstruction algorithms for large data sets. Numerical simulations and experimental data from model systems are used to illustrate the results.