

Mesoscale Optical Tomography

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June 12, 2007

Abstract

I will discuss recent work on the problem of imaging with multiply-scattered light in the mesoscopic regime, where the photon mean free path is of order the system size. Within the accuracy of the single-scattering approximation to the radiative transport equation, I will show that it is possible to recover the absorption and scattering coefficient of an inhomogeneous medium from angularly resolved measurements. This is joint work with Vadim Markel.