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## Monte Carlo simulations of turbid media<sup>1</sup> DAVID WISCHHUSEN,

ISAAC GOODIN, Q. SU, R. GROBE, Intense Laser Physics Theory Unit, Illinois State University — We simulate numerically the propagation of a light beam inside a finite highly scattering medium. The medium is characterized by an absorption coefficient, a scattering coefficient and a phase function. We analyze the spatial distribution of the scattered light at the exit surface of the medium. We then insert various absorbing objects into the medium and study their effect on the scattered light. The data are also used as a basis to examine the validity of the decomposition based imaging scheme to recover the location of the embedded objects.

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