$\mathbf{T}_{\text{EMPLE}} \; \mathbf{U}_{\text{NIVERSITY}} \; \mathbf{M}_{\text{ATHEMATICS}} \; \mathbf{C}_{\text{OLLOQUIUM}}$

Leslie Greengard

Courant Institute, NYU

will speak on

Electromagnetic Scattering and Design

ABSTRACT: I will briefly review the analytic and computational foundations of fast multipole methods (FMMs) for acoustics and electromagnetics, focusing on their use in solving scattering problems in complex geometry. I will also describe a recently developed class of fast, direct solvers that we hope will form the basis for a new generation of design tools.

> Monday, 28 February 2011 Lecture at 4:00 pm Coffee, tea, and refreshments from 3:30-5:00 pm Room 617, Wachman Building Department of Mathematics