



THE UNIVERSITY OF
CHICAGO

Department of Statistics

STATISTICS COLLOQUIUM

KUI REN

Department of Mathematics and The Institute for Computational Engineering and Sciences
University of Texas at Austin

Hybrid Imaging with Nonlinear Physics: Modeling,
Simulation and Analysis

MONDAY January 29, 2018 at 4:30 PM

Eckhart 133, 5734 S. University Avenue

Refreshments before the seminar at 4:00PM in Jones 111

ABSTRACT

Hybrid imaging aims at combining two imaging methods that are based on different physics to achieve imaging abilities that can not be offered by only one of the methods involved. In this talk, we will discuss some recent developments on the mathematical, computational and modeling aspects of some hybrid imaging methods with nonlinear physical effects, such as photoacoustics with two-photon absorption and thermoacoustics with second harmonic generation, for biomedical applications.