

## Workshop on Inverse Problems @ Columbia University

Morning Session, May 03, 2007 (Thursday) ( <a href="#">Davis Auditorium</a> )		
8:50-9:10	Guillaume Bal	Opening remarks
9:10-9:40	Andreas Hielscher	Optical tomography: potential and limits of an emerging biomedical imaging modality
9:50-10:20	Timothy Hall	Tropical cyclone landfall in a changing climate: a statistical modeling study
Coffee break		
10:50-11:20	I. Cevdet Noyan	The double inverse problem: Strain determination with diffraction in polycrystalline materials
11:30-12:00	Allen Boozer	Design of magnetic fields for fusion plasmas
Lunch break (in <a href="#">Davis Auditorium</a> )		
Afternoon Session, May 03, 2007 (Thursday) ( <a href="#">Davis Auditorium</a> )		
13:30-14:00	Donald Goldfarb	Optimization methods for Total-Variation-based image restoration
14:10-14:40	Rama Cont	Monte-Carlo methods for nonlinear inverse problems
Coffee break		
15:00-15:30	Andrew Laine	Challenges in bio-imaging: Opportunities for image analysts
15:40-16:10	Alexey Kaplan	Utility of state-space reduction in ocean and climate inverse problems
16:20-16:50	Ravi Ramamoorthi	Spherical (de)convolution for inverse rendering
17:00-17:30	Jens Vogelgesang	A forward-backward diffusion model for geomorphological generalization

Morning Session, May 04, 2007 (Friday) ( <a href="#">Davis Auditorium</a> )		
9:00-9:20	Chris Wiggins	Inverse problems and imaging for systems biology
9:30-10:00	Fred Chang	Dynamic assembly of cells: rings, filaments and tubules
10:10-10:40	Ruben L. Gonzalez	Single-molecule enzymology of complex biochemical reactions
10:50-11:20	Rafa Yuste	Reverse engineering the cortical microcircuit
Coffee break		
11:50-12:20	Alexander Klose	Fluorescence and bioluminescence tomography for molecular imaging
12:30-13:00	Elisa E. Konofagou	Ultrasound-based elasticity imaging
Lunch break (in <a href="#">APAM</a> office: 200 S. W. Mudd Building)		