Applied Physics
Optics Seminar

Optical Sensing of People, Places and Things

Dr. David Brady

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The DISP group at Duke University is sometimes called the Duke Information Spaces Project because the group considers geometric associations between sensors, sensor networks and information systems and is sometimes called the Duke Integrated Sensing and Processing group because we focus on analog and digital processing at the interface between optical fields and abstract representations. Through joint analysis of the large scale geometry of sensor systems and fine scale harmonic field analysis, DISP has developed computation and communication efficient methods for diverse sensor applications, including multidimensional imaging, biometric tracking, molecular recognition and shape analysis. This talk overviews both the conceptual basis of geometric and multiplex optical sensors and examples of computational sensors for spatial and spectral tomography and feature analysis.

Brief Bio:
David Brady is the Addy Family Professor of Electrical and Computer Engineering and the Director of the Fitzpatrick Center for Photonics and Communication Systems at Duke University. Brady received a B.A. in physics and mathematics from Macalester College and M.S. and Ph. D. degrees from Caltech. He was on the faculty of the University of Illinois at Urbana-Champaign from 1990 until moving to Duke in 2001.

Thursday, April 29, 2004.
4:00 – 5:00 p.m.
Moore 070

Refreshments at 3:45pm in the Watson lobby