

EE Student's 'Practical Guide' Seminar Series

"Challenges of a Theoretician / Experimentalist"

SSL 150 (outside and North of Seaver Science Library)

Friday, September 19, 2008

11:30 am – 1:00 pm

All EE students welcomed!

Pizza will be provided by the EE Department.

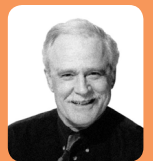
Abstract: Theory and experiment are two sides of the research coin, each with its own peculiar challenges, and both necessary for knowledge to advance. Too often, though, theorists and experimenters speak different languages. They fail to understand or appreciate each other's work and how they should fit together. In this seminar, we will discuss some of the important differences between theory and experiment, and we will also talk about how theoretical and experimental research should be kept relevant to each other.

SPEAKERS



Todd Brun received his Ph.D. in Physics from Caltech in 1994. Since then, he has worked at the University of London, the Institute for Theoretical Physics in Santa Barbara, Carnegie Mellon University, and the Institute for Advanced Study in Princeton. Brun works in the areas of quantum computation and quantum information theory he is especially interested in quantum open systems, and the

effects of environmental noise on quantum information processing. Prof. Brun is an Associate Professor for EE with joint appointments with Computer Science and Physics. He is also Associate Chair for EE - Systems and Deputy Director of the Center for Quantum Information Science and Technology (CQIST).



Robert Hellwarth received the D.Phil. degree in physics from Oxford University, England. He was a member of the technical staff at Hughes Research Labs from 1955 to 1970 and is the George T. Pflieger Chaired Professor of EE at USC. Prof. Hellwarth is known internationally for his early and continuing contributions to nonlinear and quantum optics. Prof. Hellwarth is a member of the National Academy of Engineering, National Academy of Sciences, and American Academy of Arts and Sciences. He is a Fellow of the IEEE, the OSA, the American Physical Society, and the American Association for the Advancement of Science. He has received the OSA's Charles Hard Townes Award, the IEEE Quantum Electronics Award, the Humbolt Senior Scientist Award, the L. A. Hyland Patent Award, the USC University-Wide Associates Award for Creativity in Research, and USC's University Professorship Award.