

T_cSUH Bi-Weekly Seminar

Texas Center for Superconductivity at the University of Houston

Dr. Wolfgang Donner

Department of Physics and T_cSUH
at the University of Houston



“X-ray Diffraction from Functional Perovskites”

Friday, October 14, 2005

Room 102, University of Houston Science Center
1:00 p.m. – 2:00 p.m.

Abstract

Thin epitaxial oxide films that adopt the perovskite structure display a variety of phenomena such as ferroelectricity, ferromagnetism, metal-insulator transitions or oxygen permeability. Their physical properties are strongly affected by defects such as strain gradients, point and line defects or even the presence of a surface. X-ray diffraction experiments, notably carried out using highly brilliant Synchrotron radiation, are able to shed light on those structure-property relations. The talk will present an overview of diffraction experiments on perovskite films, performed by various groups using Synchrotron radiation.

Bio

Wolfgang Donner received his doctoral degree in Natural Sciences from the University of Bochum (Germany) in 1994. He worked on the growth, ordering and phase behavior of metallic films at the University of Wuppertal and at the Max-Planck Institute for Metals Research in Stuttgart (Germany). He was responsible for diffraction instruments at the Hamburg Synchrotron Laboratory and the research reactor at the Institute Laue Langevin in Grenoble (France). He received the Feodor Lynen Fellowship of the Alexander von Humboldt Foundation in 2000 and had been appointed as an Assistant Professor of Physics at the University of Houston in 2002.

Persons with disabilities who require special accommodations in attending this lecture should call (713) 743-8210 as soon as possible.



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