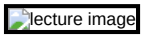

CCT Colloquium Series

Open Science Grid: Linking Universities and Laboratories in National Cyberinfrastructure

Dr. Paul Avery, Physics, University of Florida

Johnston Hall 338
September 15, 2006 - 03:00 pm

Abstract:
A collaboration of U.S. domain and computer scientists from U.S. universities and national laboratories has since 1999 conducted a multifaceted R&D program aimed at building large-scale Grid cyberinfrastructure in the U.S. This collaboration has led to the creation of Open Science Grid consisting of more than 60 sites and serving multiple disciplines, including particle physics, gravitational wave searches, digital astronomy, genome databases, nanoscience, functional magnetic resonance imaging, etc. OSG will also link many campus and regional grids and much progress has been made in federating with TeraGrid (US), caBIG (cancer research), EGEE (Europe) and grid projects in South America and Asia. This collaborative work has provided a wealth of results, including powerful new Grid tools and services; a uniform Grid middleware packaging scheme (the Virtual Data Toolkit) that simplifies Grid deployment across many sites; integration of complex Grid tools and services in large science applications; multiple education and outreach projects; and new approaches to integrating advanced network infrastructure in Grid applications.

Speaker's Bio:
Paul Avery received his Ph.D in High Energy Physics from the University of Illinois in 1980 and is Professor of Physics at the University of Florida. His research is in experimental High Energy Physics and he participates in the CLEO experiment at Cornell University and the CMS experiment at CERN, Geneva. A Fellow of the American Physical Society, Dr. Avery is the Director of two national NSF-funded Grid projects, GriPhyN and the International Virtual Data Grid Laboratory (iVDGL). Both projects are collaborations of computer scientists, physicists and astronomers conducting Grid research applied to several frontier experiments in physics and astronomy with massive computational and data needs. He is Co-Pi of the NSF funded projects CHEPREO, UltraLight and DISUN and is one of the principals seeking to establish the Open Science Grid.

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