France - USA Conference on Applied and Numerical PDEs

On the Occasion of the

70th Birthday of Roland Glowinski

March 9-10, 2007

Philip G. Hoffman Hall 232

University of Houston

International Program Committee:

W. Fitzgibbon
Y. Kuznetsov
J. Periaux
O. Pironneau

Local Organizing Committee:

J. Morgan - Chair
R.H.W. Hoppe
Y. Kuznetsov
T.-W. Pan

PROGRAM OUTLINE

Friday, March 9, 2007

09:30 - 09:50 am   Opening

09:50 - 10:20 am   **Gene H. Golub (Stanford University):** Inner/Outer Iterations for Solving Linear Systems of Equations

10:20 - 10:50 am   **Thomas J.R. Hughes (University of Texas at Austin):** Computational Geometry and Computational Mechanics

10:50 - 11:20 am   **J. Tinsley Oden (University of Texas at Austin):** Estimation and Control of Modeling Error in Multiscale Molecular Systems

11:20 - 11:50 am   **Jacques Rappaz (Ecole Polytechnique Fédérale de Lausanne, Switzerland):** Numerical Approach of the Magnetohydrodynamics Effects for the Aluminum Production

11:50 - 02:00 pm   Lunch Break

P R O G R A M   O U T L I N E

Friday, March 9, 2007

02:00 - 02:30 pm	Herbert Keller (California Institute of Technology): Preservation of Stability in the Discretization of Dynamical Systems
02:30 - 03:00 pm	B. Montgomery Pettitt (University of Houston): Knots, Loops and Writhes: How does Topo Undo them?
03:00 - 03:30 pm	Bjorn Engquist (University of Texas at Austin): Fast Computation for N-body Problems
03:30 - 04:00 pm	Coffee Break
04:00 - 04:30 pm	Alain Bensoussan (University of Texas at Dallas): Stochastic Variational Inequalities and Vibrations of Mechanical Structures
04:30 - 05:00 pm	Patrick Le Tallec (École Polytechnique, France): Numerical Simulation of Dynamic Contact Problems
05:00 - 05:30 pm	Suncica Canic (University of Houston): Fluid-Structure Interaction in Blood Flow
07:00 pm	Banquet

P R O G R A M   O U T L I N E

Saturday, March 10, 2007

09:00 - 09:30 am   Mary F. Wheeler (University of Texas at Austin): Multiscale Discretizations for Flow, Transport and Mechanics in Porous Media

09:30 - 10:00 am   Yvon Maday (Université Pierre et Marie Curie): Reduced Basis Approximations of Nonlinear Problems

10:00 - 10:30 pm   Coffee Break

10:30 - 11:00 am   Mark A. Christon and James M. Sicilian (Los Alamos National Laboratory): Old Problems and New Ideas in Interface Reconstruction (Authors: M.A. Christon, V. Dyadechko, M.M. Francois, R.V. Garimella, S.P. Schofield, J.M. Sicilian)

11:00 - 11:30 am   Danny C. Sorensen (Rice University): Balanced Truncation Model Reduction for the Oseen Equations (Authors: M. Heinkenschloss, D.C. Sorensen, K. Sun)

11:30 - 12:00 pm   Ronald W. Hoppe (University of Houston): Modeling and Simulation of Surface Acoustic Wave Driven Microfluidic Biochips

12:00 pm   Closing