

# Workshop on Applied & Computational Mathematics

## *Honoring Roland Glowinski's 80th Anniversary*

Thursday, March 9, 2017

PGH 646

### Program

10:00—10:10 A.M. - **Opening:**

M. Nicol (*Chair, Department of Mathematics, University of Houston*)

10:10—11:00 A.M. - **Methodologies and Robust Algorithms for Subsurface Simulation:**

M.F Wheeler (*University of Texas at Austin*)

11:00—11:20 A.M. - **Coffee Break**

11:20—11:50 A.M. - **Numerical Methods for Coupled Flow and Geomechanics:**

B. Riviere (*Rice University*)

11:50 A.M.—12:20 P.M. - **Surface Acoustic Wave Actuated Phase Separation on Lipid Membranes:**

R. Hoppe (*University of Houston*)

12:20—1:40 P.M. - **Lunch Break**

2:00—2:30 P.M. - **Second-order and Well-balanced Approximation of the Shallow Water Equation Using Continuous Finite Elements:**

J.L. Guermond (*Texas A&M University*)

2:30—3:00 P.M. - **Efficient Modeling of Incompressible Fluid Dynamics at Moderate Reynolds Number & LES:**

A. Quaini (*University of Houston*)

3:00—3:30 P.M. - **The SVD of the Poisson Kernel:**

G. Auchmuty (*University of Houston*)

3:30—4:00 P.M. - **Coffee Break**

4:00—4:30 P.M. - **Bilayer Plates: Numerical Methods in the Realm of Micro-scale Devices:**

A. Bonito (*Texas A&M University*)

4:30—5:00 P.M. - **Distributed Lagrange Multiplier/Fictitious Domain Methods for Simulating Particle Motion in Viscoelastic Fluids:**

T.W. Pan (*University of Houston*)

5:00—5:30 P.M. - **Shape Deformations and Nonlinear Control: A Houston Based Collaboration with Roland Glowinski:**

R. Azencott (*University of Houston*)