

36th Annual
Texas Partial Differential Equations Conference



The University of Texas at El Paso

El Paso Natural Gas Conference Center
UTEP Campus

El Paso, Texas, March 2-3, 2013

| Saturday | | |
|-----------------|---|---|
| 8:00 - 8:30 | Breakfast | * * * * * at conference venue * * * * * |
| 8:30 | Dr. Stephen B. Aley, | Interim Dean, College of Science, UTEP |
| 8:45 | Dr. M. Christina Mariani, | Chair, Department of Mathematical Sciences, UTEP |
| 9:00 - 9:20 | M. Amine Khamisi | <i>Fixed Point of Nonlinear Semigroups in Modular function spaces</i> |
| 9:25 - 9:45 | Eleftherios Gkioulekas | <i>Energy and potential enstrophy flux constraints in quasi-geostrophic models</i> |
| 9:50 - 10:10 | Alfonso Castro | <i>Radial singular solutions for a class of elliptic boundary value problems</i> |
| 10:15 - 10:25 | Christian Jäh | <i>Recent results about uniqueness and continuous dependence in the Cauchy problem for backward-parabolic operators with low-regular coefficients</i> |
| 10:30 - 10:50 | Treena Basu | <i>Anomalous Diffusion and a fast methods for fractional diffusion equations</i> |
| 10:55 - 11:15 | Joe Lakey | <i>Numerical construction of certain bandpass prolates</i> |
| 11:20 - 11:40 | Olga Kosheleva and Vladik Kreinovich | <i>Cauchy Problem for the Brans-Dicke Scalar-Tensor Theory of Gravitation May Explain Time Asymmetry of Physical Processes</i> |
| 11:45 - 12:05 | Goong Chen | <i>Progress in the Mathematical and Computatonal Study of Wind Turbine Flows and Wind Energy</i> |
| 12:10 - 1:35 | Lunch | * * * * * at conference venue * * * * * |
| 1:40 - 2:00 | Granville Sewell | <i>Solving the KPI Wave Equation with a Moving Adaptive FEM Grid</i> |
| 2:05 - 2:25 | Jianxin Zhou | <i>Solving Semilinear Elliptic Eigensolution Problems by an Implicit Minimax Method</i> |
| 2:30 - 2:50 | Buthinah Bin Dehaish | <i>Fixed Point of Asymptotic Pointwise Mappings in Hyperbolic Metric Spaces</i> |
| 2:55 - 3:15 | Daniel Onofrei | <i>On the approximate control of electromagnetic fields</i> |
| 3:20 - 3:40 | Toshikazu Kuniya | <i>Analysis for a class of periodic SIS epidemic models with age-structure</i> |
| 3:45 - 4:05 | Kanadpriya Basu | <i>Mathematical modeling and computational studies using reaction-diffusion-advection system</i> |
| 4:10 - 4:30 | Maranda Bean | <i>A Second Order Immersed Interface Method For a 1D Poroelasticity Problem with Discontinuous Coefficients</i> |
| 4:35 - 4:55 | Behzad Djafari-Rouhani | <i>Asymptotic behavior of solutions to some second order evolution equations of monotone type</i> |
| 5:00 - 5:20 | Ranadhir Roy | <i>Modeling Blood Flow in a Brain Tumor Treated Concurrently with Radiotherapy and Chemotherapy</i> |
| 5:25 - 5:45 | Lokenath Debnath | <i>Linear and Nonlinear Rossby Waves in Oceans</i> |
| 6:00 - 8:00 | Dinner | * * * * * at conference venue * * * * * |

| | | |
|---------------|-------------------------|--|
| Sunday | | |
| 8:00 - 8:30 | Breakfast | * * * * * at conference venue * * * * * |
| 8:30 - 8:50 | Suleyman Tek | <i>Using Korteweg-de Vries Equation to Obtain Surfaces in Three Dimensional Minkowski</i> |
| 8:55 - 9:15 | Shapour Heidarkhani | <i>Non-trivial solutions for systems of n fourth order partial differential equations via variational methods</i> |
| 9:20 - 9:40 | Taoufik Meklachi | <i>On The Sensitivity of a Meta-Material Slab to an exterior Charge Distribution</i> |
| 9:45 - 10:05 | Eric Platt | <i>Modelling nonlinear properties and fracture mechanics of Elastoviscoplastic materials by use of an integrity property</i> |
| 10:10 - 10:30 | Kamel Tahri | <i>Multiple solutions to singular fourth order elliptic equations</i> |
| 10:35 - 10:55 | Andrzej Pownuk | <i>Dynamic methods for parallel solution of nonlinear two phase flow equations by using the Finite Difference Method</i> |
| 11:00 - 11:20 | Maria Pia Beccar Varela | <i>Stochastic Differential Equations and Levy models</i> |
| 11:25 - 11:45 | Indranil SenGupta | <i>Bessel functions and Rainbow Option pricing PDE</i> |
| | Lunch | * * * * * at conference venue * * * * * |