

**32nd SIAM Southeastern-Atlantic Section Conference
(SIAM-SEAS 2008)
March 14 -- 15 2008, University of Central Florida, Orlando**

TIMETABLE

(BA=Business Administration Building)

Friday (March 14, 2008)

10:00am– 4:30pm	Registration (BA, Atrium)
11:00am – 12:00am	Lunch
12:00am – 12:10pm	Opening (BA 107)
12:10pm—1:10pm	Plenary Speaker: Lisa Fauci (BA 107) <i>Interface problems inspired by the biofluidmechanics of reproduction</i>
1:10pm– 2:10pm	Plenary Speaker: Neil Robertson (BA 107) <i>An outlook on graph minor structure theory</i>
2:10pm--2:30pm	Coffee Break
	Special Sessions
2: 30pm—5:00pm	Graph Theory, I (BA0107)
2:30pm—5:00pm	Integrable Equations, Their Special Limits and Riemann-Hilbert Problem Approach, I (BA 126)
2:30pm—5:00pm	Nonsmooth Optimization, I (BA110)
2:30pm—4:30pm	Numerical Methods for Partial Differential Equations, I (BA 209)
2:30pm—5:00pm	Phase Field Methods and Applications (BA 218)
2:30pm—4:30pm	Recent Developments on Empirical Likelihood and Nonparametric Statistics, I (BA 121)
3:30pm—5:00pm	Toric Varieties, I (BA 146)
2:30pm – 4:30pm	Turbulence, I (BA 212)
2:30pm –5:00pm	Wave Propagation and Tomography, I (BA 207)
2:30pm –5:00pm	Contributing session, I (BA 225)
6:30pm	Reception (Live Oak Event Center)

Saturday (March 15, 2008)

9:30am– 11:30pm	Registration (BA, Atrium)
	Special Sessions
8:15am—10:45am	Graph Theory, II (BA0107)
8:45am—10:15am	Partial Differential Equations and Applications (BA 221)
8:15am—10:45am	Nonsmooth Optimization, II (BA110)
8:45am—10:45am	Numerical Methods for Partial Differential Equations, II (BA 209)
8:45am—10:45am	Recent Developments on Empirical Likelihood and Nonparametric Statistics, II (BA 121)
9:15am—10:45am	Toric Varieties, II (BA 146)
8:45am—10:15am	Turbulence, II (BA 212)
8:15am—10:45am	Wave Propagation and Tomography, II (BA 207)
8:45am—10:45am	Probability Theory and Applications, I (BA 220)
8:15am—10:45am	Wavelets and Sampling, I (BA 218)
8:15am—10:45am	Contributing session, II (BA 225)
10:45am – 11:00am	Coffee break
11:00am—12:00am	Plenary Speaker: Akram Aldroubi (BA107) <i>Non-linear signal representations, compressed sensing, sampling and dictionary design</i>
12:00am—1:10pm	Lunch break
1:10pm –2:10pm	Plenary Speaker : Ioannis Karatzas (BA107) <i>Some Stochastic Control Problems in Mathematical Finance</i>
2:10pm—2:30pm	Coffee break
	Special Sessions
2:30pm –4:30pm	Graph Theory, III (BA0107)
2:30pm –5:30pm	Integrable Equations, Their Special Limits and Riemann-Hilbert Problem Approach, II (BA 126)
2:30pm—4:30pm	Nonsmooth Optimization, III (BA110)
2:30pm – 4:30pm	Recent Developments on Empirical Likelihood and Nonparametric Statistics, III (BA 121)
2:30pm –4:30pm	Probability Theory and Applications, II (BA 220)
2:30pm –6:00pm	Wavelets and Sampling, II (BA 218)

Program

Orlando, Florida, March 14 -- 15, 2008

Friday, March 14

Registration

10:00am—4:30pm

Atrium, Business Administration building

Plenary Talk

12:10pm—1:10pm

Room 107 Business Administration building

Chair: Piotr Mikusinski

12:10pm—1:10pm

Lisa Fauci (Tulane University)

Title: *Interface problems inspired by the biofluid mechanics of reproduction*

Plenary Talk

1:10pm—2:10pm

Room 107 Business Administration building

Chair: Brenton leMesurier

1:10pm— 2:10pm

Neil Robertson (Ohio State University)

Title: *An outlook on graph minor structure theory*

Special session on Graph Theory, I

Friday 2:30pm –5:00pm

Room 107 Business Administration building

The organizers: Zixia Song and Nick Zhao (University of Central Florida)

Session chair: Xingxing Yu

- 2:30pm – 3:00pm Xing xing Yu -- Georgia Institute of Technology
Title: *Approximating the chromatic index of multigraphs*
- 3:00pm – 3:30pm Mark Ellingham -- Vanderbilt University
Title: *Constructing all minimum genus embeddings of $K_{3,n}$*
- 3:30pm – 4:00pm Dan Archdeacon -- University of Vermont
Title: *Monohedral Tilings*
- 4:00pm – 4:30pm Michael O. Albertson -- Smith College
Title: *The Distinguishing Number of a Graph*
- 4:30pm – 5:00pm Xiaoya Zha -- Middle Tennessee State University,
Title: *Representativity of Cayley Maps*

Special Session on Integrable Equations, Their Special Limits and Riemann-Hilbert Approach, I

Friday 2:30pm-5:00pm

Room 126, Business Administration Building

The organizers: Alexander Tovbis and Stephanos Venakides
Session Chair: Alexander Tovbis

- 2:30pm – 3:00pm Stephanos Venakides -- Duke University
Title: *Long-time focusing NLS asymptotics and their connection to a catastrophic collision*
- 3:00pm – 3:30pm Sergey Belov -- Duke University
Title: *Numerical studies of the semiclassical limit of the focusing NLS near a catastrophic collision*
- 3:30pm – 4:00pm Fei-Ran Tian -- Ohio State University
Title: *Non-Strictly Hyperbolic Whitham Equations*
- 4:00pm – 4:30pm Wen-Xiu Ma -- University of South Florida
Title: *Solving integrable equations by the Wronskian and Casoratian*
- 4:30pm – 5:00pm Virgil U. Pierce -- The Ohio State University
Title: *The Whitham equations for the higher order KdV and the defocusing complex mKdV equations*

Special session on Nonsmooth Optimization, I

Friday 2:30pm—5:00pm

Room 110 Business Administration building

The organizer: M. Zuhair Nashed (University of Central Florida)
Session chair: M. Zuhair Nashed

- 2:30pm – 3:00pm Florin A. Potra -- University of Maryland, Baltimore County
Title: *On the numerical solution of complementarity problems*
- 3:00pm – 3:30pm William W. Hager -- University of Florida
Title: *An Affine-scaling Interior-point CBB Method for Box-Constrained Optimization*
- 3:30pm – 4:00pm Michael R. Caputo -- University of Central Florida
Title: *The Intrinsic Qualitative Properties of Intertemporal Optimizing Agents are Invariant to the Functional Form of the Discount Function*

- 4:00 pm– 4:30pm I. M. Navon -- Florida State University
Title: *Application of Nonsmooth Optimization in Ensemble and Variational Data Assimilation Problems*
- 4:30 pm– 5:00pm Beyza Caliskan Aslan -- University of Florida
Title: *A Generalized Eigenproblem for the Laplacian and Its Application to the Lightning Discharge*

Special session on Numerical Methods for Partial Differential Equations, I

Friday 2:30pm—4:30pm

Room 209 Business Administration building

The organizer: Lili Ju (University of South Carolina)
Session chair: Lili Ju,

- 2:30pm – 3:00pm Kening Wang -- University of North Florida
Title: *An Iterative Substructuring Algorithm for \mathcal{SC}_0 Interior Penalty Methods*
- 3:00pm – 3:30pm Hyesuk Lee -- Clemson University
Title: *Analysis and Finite Element Approximation of an Optimal Control*
- 3:30pm – 4:00pm Vani Cheruvu -- Florida State University
Title: *High-order Methods for Centroidal voronoi Tessellations on a Sphere*
- 4:00pm – 4:30pm Shuyu Sun -- Clemson University
Title: *Conservative and Adaptive Galerkin Methods for Coupling Flow and Transport in Porous Media*

Special session on Phase Field Methods and Applications

Friday 2:30pm—5:00pm

Room 218 Business Administration Building

The organizer: Xiaoqiang Wang (Florida State University)
Session Chair: Xiaoqiang Wang

- 2:30pm – 3:00pm David J. Horntrop -- New Jersey Institute of Technology
Title: *Simulation of Mesoscopic Models for Self-Organization in Materials Data*
- 3:00pm – 3:30pm Xiaofeng Yang -- the University of North Carolina at Chapel Hill
Title: *An energetic variational phase field model for two incompressible flows: Newtonian fluids and complex fluids*
- 3:30pm – 4:00pm Tianyu Zhang -- Florida State University
Title: *Phase-Field Models for Biofilm Growth, Expansion, and Biofilm-Flow Interaction*
- 4:00pm – 4:30pm Fang Jin -- University of California, Irvine
Title: *Multiscale models of tumor growth and angiogenesis*
- 4:30pm – 5:00pm Lei Zhang, Pennsylvania State University
Title: *Phase field modeling and simulation of 2D/3D critical nuclei morphology in solid state phase transitions*

Special session on Recent Developments on Empirical Likelihood and Nonparametric Statistics, I

Friday 2:30pm—4:30pm

Room 121 Business Administration building

The organizer: Jian-Jian Ren (University of Central Florida)
Session Chair: Jian-Jian Ren

- 2:30pm – 3:00pm Mai Zhou -- University of Kentucky
Title: *Censored Data Parametric/Nonparametric Hybrid Two Sample Problems by Empirical Likelihood*
- 3:00pm – 3:30pm Nicole Lazar -- University of Georgia
Title: *Quantile Estimation for Discrete Data via Empirical Likelihood*
- 3:30pm – 4:00pm Yichuan Zhao -- Georgia State University
Title: *Empirical likelihood Based Inference for the Calibration Regression Model with Lifetime Medical Cost*
- 4:00pm – 4:30pm Lianfen Qian -- Florida Atlantic University
Title: *Efficient Empirical Likelihood Methods for Longitudinal Data*

Special session on Toric Varieties, I

Friday 3:30pm—5:00pm

Room 146 Business Administration building

The organizer: Joseph Brennan (University of Central Florida)
Session Chair: Joseph Brennan

- 3:30pm – 4:00pm Sonja Petrovic -- University of Kentucky
Title: *Properties of cut ideals of certain graphs*
- 4:00pm – 4:30pm Rafael H. Villarreal -- Centro de Investigacion y de Estudios Avanzados del IPN,
Title: *Algebraic and combinatorial properties of ideals and algebras of uniform clutters of TDI systems*
- 4:30pm – 5:00pm Joseph Brennan -- University of Central Florida
Title: *Degrees of generators of cut ideals*

Special session on Turbulence, I

Friday 2:30pm—4:30pm

Room 212 Business Administration Building

The organizer: Eleftherios Gkioulekas (University of Central Florida)
Session Chair: Bhimsen Shivamoggi

- 2:30pm – 3:00pm Mogens Melander -- Southern Methodist University
Title: *Analysis of a Symmetry leading to an Inertial Range Similarity Theory for Isotropic Turbulence*
- 3:00pm – 3:30pm John Bowman -- University of Alberta, Canada
Title: *Casimir Cascades in Two Dimensional Turbulence*
- 3:30pm – 4:00pm Minping Wan -- The Johns Hopkins University

Title: *Physical mechanism of the inverse energy cascade of 2D turbulence: a numerical investigation*
4:00pm – 4:30pm Eleftherios Gkioulekas -- University of Central Florida
Title: *Locality and stability of the cascades of two-dimensional turbulence*

Special session on Wave Propagation and Tomography, I

Friday 2:30pm—5:00pm

Room 207 Business Administration Building

The organizers: Alexander Katsevich and Alexandru Tamasan (University of Central Florida)
Session Chair: Alexander Katsevich

2:30pm – 3:00pm John Schotland -- University of Pennsylvania
Title: *Image Reconstruction in Optical Tomography*
3:00pm – 3:30pm Shari Moskow -- Drexel University
Title: *Convergence and Stability of the Inverse Scattering Series For Diffuse Waves*
3:30pm – 4:00pm Alexander Timonov -- University of South Carolina Upstate
Title: *On a new approach to constructing globally convergent algorithms for quantitative imaging*
4:00pm – 4:30pm Jeong-Rock Yoon -- Clemson University
Title: *Magnetic resonance elastography and its detectability*
4:30pm – 5:00pm Bernard Mair -- University of Florida
Title: *A Non-Monotone Algorithm for Tomographic Reconstruction*

Contributing session, I

Friday 2:30pm—5:00pm

Room 225 Business Administration Building

The organizers: The Conference Organizers
Session Chair: Constance Schober

2:30pm – 3:00pm Hatim Boustique -- University of Central Florida
Title: *Lattice-Valued Convergence*
3:00pm – 3:30pm Daniel J. Galiffa -- University of Central Florida
Title: *On a Numerical Method for a Homogeneous Nonlinear, Nonlocal Elliptic Boundary Value Problem*
3:30pm – 4:00pm Shanzhen Gao -- Florida Atlantic University
Title: *Shift Operators on Polynomials*
4:00pm – 4:30pm Todd Smith -- University of Central Florida
Title: *TBA*
4:30pm – 5:00pm Albert Steppi -- University of Central Florida
Title: *TBA*

6:30pm **Reception** (Live Oak Event Center)

Saturday, March 15

Registration

9:30am—11:30am

Atrium, Business Administration building

Special session on Graph Theory, II

Saturday 8:15am—10:45am

Room 0107 Business Administration Building

The organizers: Zixia Song and Nick Zhao (University of Central Florida)
Session Chair: Ron Gould

- 8:15am – 8:45am Ron Gould -- Emory University
Title: *Distributing Vertices on Hamiltonian Cycles*
- 8:45am – 9:15am Guantao Chen -- Georgia State University
Title: *Small 3-connected dominating sets in a 3-connected graph*
- 9:15am – 9:45am Michael D. Plummer -- Vanderbilt University
Title: *Vertex criticality for connected domination*
- 9:45am–10:15am Hong-Jian Lai -- West Virginia University
Title: *On circular flows of graphs*
- 10:15am–10:45am Wenan Zang -- University of Hong Kong
Title: *The Circumference of a Graph with no $K_{3,t}$ -minor*

Special session on Partial Differential Equations and Applications

Saturday 8:45am—10:15am

Room 221 Business Administration Building

The organizer: Ugur G. Abdulla (Florida Institute of Technology)
Session chair: Ugur G. Abdulla

- 8:45am – 9:15am Ravi P. Agarwal -- Florida Institute of Technology
Title: *Singular Integral Equations with Real World Applications*
- 9:15am – 9:45am Ugur G. Abdulla -- Florida Institute of Technology
Title: *Wiener's Criterion at Infinity for the Heat Equation and its Measure-Theoretical Counterpart*
- 9:45am – 10:15am Tariyel Kiguradze -- Florida Institute of Technology
Title: *On periodic solutions of linear partial differential equations*

Special session on Nonsmooth Optimization, II

Saturday 8:15am—10:45am

ROOM 110 Business Administration Building

The organizer: Zuhair Nashed (University of Central Florida)
Session Chair: Xin Li

- 8:15am – 8:45am Ram Verma -- International Publications
Title: *Generalized Proximal Point Algorithm and η -Maximal Monotonicity Framework with Application to Minimization*
- 8:45am – 9:15am R. N. Mohapatra -- University of Central Florida
Title: *Some Inevxity Results in Multiobjective Optimization*
- 9:15am – 9:45am Hongchao Zhang -- University of Minnesota
Title: *A Derivative-free Approach for the Least-Squares Minimization*
- 9:45am – 10:15am Elena Constantin -- University at Pittsburgh at Johnstown
Title: *Higher Order Optimality Conditions for Nonsmooth Functions*
- 10:15am–10:45am P.P.B. Eggermont -- University of Delaware
Title: *Ill-posed operator equations with weakly bounded noise*

Special session on Numerical Methods for Partial Differential Equations, II

Saturday 8:45am—10:45am

Room 209 Business Administration Building

The organizer: Lili Ju (University of South Carolina)
Session Chair: Lili Ju

- 8:45am – 9:15am Yanzhi Zhang -- Florida State University
Title: *Efficient and Stable Spectral Methods for Dynamics of Bose-Einstein Condensation*
- 9:15am – 9:45am Li Tian -- University of South Carolina
Title: *Analysis of a Mixed Finite Volume Discretization of Fourth Order Equations on General Surfaces*
- 9:45am – 10:15am Hoa Nguyen -- Florida State University
Title: *Adaptive Anisotropic Meshes for Steady-State Convection Dominated Problems*
- 10:15am–10:45am John Crispell -- Clemson University
Title: *A Fractional Step θ -Method for Time Dependent Viscoelastic Fluid Flow*

Special session on Recent Developments on Empirical Likelihood and Nonparametric Statistics, II

Saturday 8:45am—10:45am

Room 121 Business Administration building

The organizer: Jian-Jian Ren (University of Central Florida)
Session Chair: Nicole Lazar

- 8:45am – 9:15am S.N. Lahiri, Texas A&M University
Title: *Higher Order Properties of Empirical Likelihood Methods for Weakly Dependent Time Series Data*
- 9:15am – 9:45am Jian-Jian Ren, University of Central Florida
Title: *Weighted Empirical Likelihood in Some Two-Sample Semiparametric Models*
- 9:45am – 10:15am Liang Peng, Georgia Institute of Technology
Title: *Conditional Variance Estimation in Heteroscedastic Regression Models*
- 10:15am –10:45am Runze Li, Penn State University
Title: *Local Polynomial Composite Quantile Regression*

Special session on Toric Varieties, II

Saturday 9:15am—10:45am

Room 146 Business Administration Building

The organizer: Joseph Brennan (University of Central Florida)
Session Chair: Teng Chen

- 9:15am – 9:45am Seth Sullivant -- Harvard University
Title: *Algebraic Factor Analysis*
- 9:45am – 10:15am Ruriko Yoshida -- University of Kentucky
Title: *Markov bases for two-way subtable sum problems*
- 10:15am – 10:45am Luis David Garcia-Puente -- Sam Houston State University
Title: *Linear precision for toric patches*

Special session on Turbulence, II

Saturday 8:45am—10:15am

Room 212 Business Administration Building

The organizer: Eleftherios Gkioulekas (University of Central Florida)
Session Chair: Eleftherios Gkioulekas

- 8:45am – 9:15am Bhimsen Shivamoggi -- University of Central Florida
Title: *Vortex Stretching in a Compressible Fluid and Applications to Turbulence*
- 9:15am – 9:45am Brian Arbic -- J.J. Pickle Research Campus
Title: *Global energy dissipation rate of oceanic low-frequency flows by quadratic*

bottom drag: Results from observations and 1/32 degree models

9:45am –10:15am Francesco Fedele -- Georgia Institute of Technology
Title: *Rogue waves in oceanic turbulence and solitons in axisymmetric turbulent flow: an extreme view*

Special session on Wave Propagation and Tomography, II

Saturday 8:15am—10:45am

Room 207 Business Administration Building

The organizers: Alexander Katsevich and Alexandru Tamasan (University of Central Florida)
Session Chair: Alexandru Tamasan

- 8:15am– 8:45am Les Butler -- Louisiana State University
Title: *Synchrotron X-ray and Neutron Tomography: 3D Imaging for Chemical and Materials Science Projects*
- 8:45am – 9:15am Adel Faridani -- Oregon State University
Title: *Numerical and theoretical explorations in helical and fan-beam tomography*
- 9:15am – 9:45am Alexander Zamyatin -- Toshiba Medical Research Institute USA, Inc.
Title: *An exact reconstruction algorithm for computed tomography utilizing circle and line trajectory with optional gantry tilt*
- 9:45am--10:15am Alexander Katsevich -- University of Central Florida
Title: *Motion compensated local tomography*
- 10:15am-10:45am Alexandru Tamasan -- University of Central Florida
Title: *On the inversion of the Attenuated Doppler transform for planar vector fields*

Special session on Probability Theory and Applications, I

Saturday 8:45am—10:45am

Room 220 Business Administration Building

The organizers: Farid AitSahlia (University of Florida), Gary Richardson (University of Central Florida) and Jiongmin Yong (University of Central Florida)
Session Chair: Gary Richardson

- 8:45am – 9:15am Farid AitSahlia -- University of Florida
Title: *Efficient Pricing of American Option in a Stochastic Volatility Model with Jumps*
- 9:15am – 9:45am Yevgeny Goncharov -- Florida State University
Title: *On Resolving Curse of Dimensionality of Mortgage Rate Modeling*
- 9:45am – 10:15am Alec Kercheval -- Florida State University
Title: *Central Bank Impulse Control for Currency with Nonconstant Volatility*
- 10:15am–10:45am Hongwei Long -- Florida Atlantic University
Title: *Least Squares Estimator for Ornstein-Uhlenbeck Processes Driven by Stable Levy Motions*

Special session on Wavelets and Sampling, I

Saturday 8:15am—10:45am

Room 218 Business Administration Building

The organizers: Dorin Dutkay, Deguang Han and Qiyu Sun (University of Central Florida)
Session Chair: Dorin Dutkay

- 8:15am – 8:45am Jeffrey Andrew Hogan -- University of Arkansas
Title: *Sampling in shift-invariant, non-translation-invariant spaces*
- 8:45am– 9:15am Joe Lakey -- New Mexico State University
Title: *Sampling and time-frequency localization for multi-bandlimited functions*
- 9:15am – 9:45am Chang Eon Shin -- Sogang University, South Korea
Title: *Nonuniform sampling of bandlimited functions*
- 9:45am –10:15am Yi Wang -- Auburn University
Title: *A Sampling Theorem for Non-bandlimited Signals*
- 10:15am–10:45am Ahmed I. Zayed -- DePaul University
Title: *A Generalization of the Paley-Wiener Space*

Contributing session, II

Friday 8:45am—10:45am

Room 225 Business Administration Building

The organizers: The Conference Organizers
Session Chair: Kuppalapalle Vajravelu

- 8:15am – 8:45am Ibrahima Kaba -- Embry-Riddle Aeronautical University
Title: *Repetitive Laser Pulse Heating of A Microsphere*
- 8:45am – 9:15am Justin Davis -- University of Central Florida
Title: *Classification of animal signals: a comparison of rival signal processing procedures*
- 9:15am – 9:45am Manisha Goswami -- University of Florida
Title: *American Option Pricing under Stochastic Volatility: A Model Comparison*
- 9:45am – 10:15am Suchandan Guha -- University of Florida
Title: *American Option Pricing under Stochastic Volatility: An Efficient Numerical Approach*
- 10:15am—10:45am Zhihua Liu -- Florida Atlantic University
Title: *Change-point Estimation via Empirical Likelihood*

Plenary Talk**11:00am—12:00am****Room 107 Business Administration Building**

Chair: Qiyu Sun

11:00am—12:00am Akram Aldroubi (Vanderbilt University)

Title: *Non-linear signal representations, compressed sensing, sampling and dictionary design*

Plenary Talk**1:00pm—2:00pm****Room 107 Business Administration Building**

Chair: Jiongmin Yong

1:10pm –2:10pm Ioannis Karatzas (Columbia University)

Title: *Some Stochastic Control Problems in Mathematical Finance*

Special session on Graph Theory, III**Saturday 2:30pm—4:30am****Room 107 Business Administration Building**

The organizers: Zixia Song and Nick Zhao (University of Central Florida)

Session Chair: Gexin Yu

2:30pm – 3:00pm Gexin Yu -- Vanderbilt University

Title: *Ore-type Packing Problems*

3:00pm – 3:30pm Debra Boutin -- Hamilton College

Title: *Determining Sets, Resolving Sets, and the Exchange Property*

3:30pm – 4:00pm Chris Stephens -- Middle Tennessee State University

Title: *Spanning disks in toroidal embeddings*

4:00pm – 4:30pm Carl Yerger -- Georgia Institute of Technology

Title: *Six-Critical Graphs on the Klein Bottle*

Special Session on Integrable Equations, Their Special Limits and Riemann-Hilbert Approach, II

Friday 2:30pm-5:30pm

Room 126, Business Administration Building

The organizers: Alexander Tovbis and Stephanos Venakides
Session Chair: Stephanos Venakides

- 2:30pm – 3:00pm Anna Boutet de Monvel -- Universite Paris Diderot Paris 7, France.
Title: *Riemann-Hilbert problem approach to long-time asymptotics for some nonlinear integrable problems*
- 3:00pm – 3:30pm Peter Miller -- University of Michigan
Title: *On the Semiclassical Limit for the Sine-Gordon Equation*
- 3:30pm – 4:00pm Marco Bertola -- Concordia University
Title: *G-functions and equilibrium measures without a variational problem*
- 4:00pm – 4:30pm Alexander Tovbis --University of Central Florida,
Title: *Direct and Inverse Scattering transforms for the semiclassical focusing Nonlinear Schroedinger Equation*
- 4:30pm – 5:00pm Robert Buckingham -- University of Michigan
Title: *Total integrals of global solutions to Painleve II*
- 5:00pm – 5:30pm Mathew Johnson -- University of Illinois at Urbana-Champaign
Title: *Krein Signatures for Eigenvalue Problems Associated to Integrable Systems*

Special session on Nonsmooth Optimization, III

Saturday 2:30pm—4:30pm

ROOM 110 Business Administration Building

The organizer: Zuhair Nashed (University of Central Florida)
Session Chair: R.N. Mohapatra

- 2:30pm –3:00pm Dzung Phan -- University of Florida
Title: *A Branch and Bound Approach to Solving Quadratic Programs*
- 3:00pm –3:30pm Xin Li -- University of Central Florida
Title: *Refining Algorithms in Correlation Filter Design for Target Detection*
- 3:30pm –4:00pm Paul-Emile Mainge -- University of Antilles-Guyane, France
Title: *Inertial and relaxed algorithms for monotone inclusions and fixed point problems*
- 4:00pm –4:30pm M. Zuhair Nashed -- University of Central Florida
Title: *Slant Differentiability and Applications to Newton-like Methods*

Special session on Recent Developments on Empirical Likelihood and Nonparametric Statistics, III

Saturday 2:30pm—4:30pm

Room 121 Business Administration building

The organizer: Jian-Jian Ren (University of Central Florida)
Session Chair: Mai Zhou

- 2:30pm –3:00pm Qiqing Yu -- Binghamton University
Title: *Identifiability and Consistency in Masking Models for Competing Risks Data*
- 3:00pm –3:30pm Arthur Berg -- University of Florida
Title: *Nonparametric Function Estimation with Infinite-Order Kernels*
- 3:30pm –4:00pm Bing Li -- Penn State University
Title: *Dimension Reduction for Non-Elliptically Distributed Predictors*
- 4:00pm –4:30pm Miguel Arcones -- Binghamton University
Title: *Minimax Estimators of the Coverage Probability of the Impermissible Error for a Location Family*

Special session on Probability Theory and Applications, II

Saturday 2:30pm—4:30pm

Room 220 Business Administration Building

The organizers: Farid AitSahlia (University of Florida), Gary Richardson (University of Central Florida) and Jiongmin Yong (University of Central Florida)
Session Chair: Farid AitSahlia

- 2:30pm –3:00pm Arunava Mukherjea -- University of Texas -Pan American
Title: *Skeletons, cyclicity, and products of i.i.d. stochastic matrices*
- 3:00pm –3:30pm Jason Swanson -- University of Central Florida
Title: *The median of independent Brownian motions and other colliding Particle models*
- 3:30pm –4:00pm Mingxin Xu -- UNC Charlotte
Title: *Infinite Horizon Optimal Search Problem with Hiring and Firing Options*
- 4:00pm –4:30pm Liqing Yan -- University of Florida
Title: *Asymptotic optimal tradeoff in Monte Carlo simulation of Security prices*

Special session on Wavelets and Sampling, II

Saturday 2:30pm—6:00pm

Room 218 Business Administration Building

The organizers: Dorin Dutkay, Deguang Han and Qiyu Sun (University of Central Florida)
Session Chair: Deguang Han

- 2:30pm –3:00pm David Larson --Texas A&M University
Title: *Density and Orthogonality of wavelet frames*
- 3:00pm –3:30pm Jean-Pierre Gabardo -- McMaster University
Title: *Weighted irregular Gabor tight frames and dual systems*

- 3:30pm –4:00pm Douglas Hardin -- Vanderbilt University
Title: *Orthogonal spline wavelets on irregular knots*
- 4:00pm –4:30pm Gabriel Picioroaga -- Binghamton University
Title: *Orthonormal Dilations of Parseval Wavelets*
- 4:30pm –5:00pm Alexander Powell -- Vanderbilt University
Title: *MSE bounds for the RG-algorithm*
- 5:00pm –5:30pm Myung-Sin Song -- Southern Illinois University
Title: *Analysis of Fractals, Image Compression, Entropy Encoding and Karhunen-Loeve Transforms*
- 5:30pm –6:00pm Palle Jorgensen -- The University of Iowa
Title: *Multiscale problems*