

# NEAM 1

Friday October 14

After 8:00 Registration in **Edwards 106A**

## **Edwards 105**

8:40 - 9:00 Dean Maliekal's Address

9:00 - 9:50 Brett D. Wick, Washington University in St. Louis  
*Commutators and BMO*

10:00 - 10:30 Dan Geba, University of Rochester,  
*Regularity results for generalizations of the wave maps equation*

10:30 - 11:00 Coffee Break

11:00 - 11:50 Jingbo Xia, University at Buffalo, SUNY  
*Hankel Operators On Weighted Bergman Spaces and Norm Ideals*

12:00 - 12:50 Alex Iosevich, University of Rochester  
*Local smoothing for the wave equation and the Falconer conjecture*

12:50 - 2:30 Lunch Break

Contributed Section 1

## **Edwards 103**

2:30 - 2:50 Afrah Abdou, King Abdulaziz University

*Common fixed point results for multi - valued mappings with some examples*

2:55 - 3:15 Qiyu Sun, University of Central Florida

*Wiener's lemma and stability for infinite matrices*

3:20 - 3:40 Wanqing Cheng, University of Arkansas (Fayetteville)

*Spherical  $\Pi$ -type Operators in Clifford Analysis and Applications*

3:45 - 4:05 Marius Beceanu, University at Albany, SUNY

*New tools for the study of supercritical wave equations*

4:05 - 4:30 Coffee Break

4:30 - 4:50 Chao Ding, University of Arkansas, Fayetteville

*Construction of Arbitrary Order Conformally Invariant Operators in Higher Spin Spaces*

4:55 - 5:15 Cheng Cheng, University of Central Florida

*Spatially distributed sampling and reconstruction of signals on a graph*

5:20 - 5:40 Jianhua Gong, United Arab Emirates University

*Quasiconformal Groups*

Contributed Section 2  
**Edwards 104**

- 2:30 - 2:50 Joseph Cima, University of North Carolina at Chapel Hill  
*A Volterra operator on Hardy Spaces*
- 2:55 - 3:15 Nathan Feldman, Washington & Lee University  
*Convex-Polynomial Interpolation, Approximation & Invariant Convex Sets*
- 3:20 - 3:40 Zhijian Wu, University of Nevada, Las Vegas  
*Difference of weighted composition operators on Bergman spaces*
- 3:45 - 4:05 Ruhan Zhao, College at Brockport, SUNY  
*Closures of Hardy and Hardy-Sobolev spaces in the Bloch type space on the unit ball*
- 4:05 - 4:30 Coffee Break
- 4:30 - 4:50 Robert Rahm Jr, Washington University in St. Louis  
*Fractional Integral Operators Associated to Schrodinger Operators*
- 4:55 - 5:15 Joshua Isralowitz, University at Albany, SUNY  
*A (very, very brief) introduction to matrixially degenerate elliptic systems of PDEs*
- 5:20 - 5:40 Miron Bekker, University of Pittsburgh at Johnstown  
*Parametrization of Scale-Invariant Self-Adjoint Extensions of symmetric Scale-Invariant Operators*

Contributed Section 3  
**Edwards 106**

- 2:30 - 2:50 Pablo Jimenez-Rodriguez Kent State University  
*Polynomial inequalities on circular sectors*
- 2:55 - 3:15 Dorin Ghisa, York University  
*The Geometry of the Mappings by General Dirichlet Series*
- 3:20 - 3:40 Sergii Myroshnychenko, Kent State University  
*On polytopes with congruent sections and projections*
- 3:45 - 4:05 Grigore Sălăgean, The College at Brockport, SUNY  
*On the order of convolution consistence of certain classes of harmonic functions defined using a convolution operator*
- 4:05 - 4:30 Coffee Break
- 4:30 - 4:50 Isaac DeFrain, Kent State University  
*Chebyshev polynomials on a continuum in the complex plane*
- 4:55 - 5:15 Shan Tai Sandy Chan, Syracuse University  
*On holomorphic isometries of complex unit balls into irreducible bounded symmetric domains of rank  $\geq 2$*

# NEAM 1

Saturday October 15

After 8:00 Registration in **Edwards 106A**

## Edwards 105

9:00 - 9:50 Aimo Hinkkanen, University of Illinois at Urbana-Champaign  
*Complex dilatation and the Cartan-Kähler theory*

10:00 - 10:30 Dan Coman, Syracuse University  
*On the first order asymptotics of partial Bergman kernels*

10:30 - 11:00 Coffee Break

11:00 - 11:50 Camil Muscalu, Cornell University  
*The helicoidal method*

11:50 - 1:00 Lunch Break & Panel Discussion How to get a tenure - track job

1:00 - 1:30 Anca Rădulescu, SUNY New Paltz  
*Extensions of the Mandelbrot for templates and networks of quadratic maps*

1:35 - 2:05 Kazuo Yamazaki, University of Rochester  
*Global stability and uniform persistence of the reaction-convection-diffusion cholera epidemic model*

Special Session on Fluid Dynamics

## Edwards 103

2:15 - 2:35 Manil Thankamani Mohan, Air Force Institute of Technology  
*Some Recent Progress in Quasilinear Hyperbolic Systems: New Local Solvability Methods and Stochastic Analysis*

2:40 - 3:00 Vincent Martinez, Tulane University  
*Analytical studies for a Data Assimilation Algorithm: Surface data, Higher-order synchronization, and Time-averaged measurements*

3:05 - 3:25 Zachary Bradshaw, University of Virginia  
*Scaling invariant solutions to 3D NSE*

3:30 - 3:50 Andrei Țarfulea, University of Chicago  
*Front propagation and symmetrization for the fractional Fisher-KPP equation*

3:50 - 4:20 Coffee Break

4:20 - 4:40 Jiahong Wu, Oklahoma State University  
*The 2D Magnetohydrodynamic (MHD) Equation With Partial Dissipation*

4:45 - 5:05 Bradley McCaskill, University of Wyoming  
*Continuous Data Assimilation for Miscible Displacement in Porous Media*

5:10 - 5:30 Chenyun Luo, Johns Hopkins University

*On the motion of the free surface of a compressible liquid*  
 5:35 - 5:55 Lizheng Tao, University of California, Riverside  
*Inviscid limit problem with fractional Laplacian*

Special Session on Dynamical Systems

**Edwards 104**

2:15 - 2:35 Natalie Frank, Vassar College  
*Towards spectral analysis of self-similar tilings via a renormalization approach*  
 2:40 - 3:00 Edmond Rusjan, SUNY IT  
*Fractal Trees and Poisson - A Model of the Blood Flow in the Retina of the Eye*  
 3:05 - 3:25 Wael Al-Sawai, University of South Florida  
*Perturbation of Gaudin Integrable Dynamical Systems*  
 3:30 - 3:50 Armenak Petrosyan, Vanderbilt University  
*Iterative actions of operators on a system of vectors*  
 3:50 - 4:20 Coffee Break  
 4:20 - 4:40 Roza Aceska, Ball State University  
*Tight and scalable frames in dynamical sampling*  
 4:45 - 5:05 Flavia Colonna, George Mason University  
*Hypercyclicity of composition operators on Banach spaces of analytic functions*  
 5:10 - 5:30 Mai Tran, University at Albany, SUNY  
*An Exploration on the Resolvent Set with Geometry*  
 5:35 - 5:55 Gabriel Prăjitură, College at Brockport, SUNY  
*Operators with simple orbits*

Contributed Section 4

**Edwards 106**

2:15 - 2:35 Oleksandr Vlasiuk  
*Point Configurations via Hypersingular Riesz Energy With an External Field*  
 2:40 - 3:00 Pritha Chakraborty, Texas A&M University Corpus-Christi  
*A Different Approach to Korenblum's Conjecture in Bergman Spaces*  
 3:05 - 3:25 Cezar Lupu, University of Pittsburgh  
*The Riemann zeta function for integer values and evaluation of some multiple zeta values*  
 3:30 - 3:50 Mihai Stoiciu, Williams College  
*Transition in the Eigenvalue Distribution of Random and Deterministic Unitary Operators*  
 3:50 - 4:20 Coffee Break  
 4:20 - 4:40 Mihai Băileşteanu, Central Connecticut State University  
*Geometric methods to study non-linear parabolic equation*  
 4:45 - 5:05 Jan Lang, The Ohio State University  
*Spectral theory on Banach spaces*  
 5:10 - 5:30 Yunyun Yang, West Virginia University Institute of Technology  
*Distributions in Spaces with Thick Points*

7:00 Dinner

# NEAM 1

Sunday October 16

## Edwards 105

9:00 - 9:50 Dechao Zheng, Vanderbilt University

*Multiplication operators on the Bergman spaces of polygons*

10:00 - 10:30 Javad Mashreghi, Laval University

*Numerical range versus spectrum*

10:30 - 11:00 Coffee refueling

11:00 - 11:50 Kelly Bickel, Bucknell University

*Compressions of the shift on two-variable model spaces*

12:00 - 12:50 Vladimir Peller, Michigan State University

*M.G. Krein's problem and the Lifshits-Krein trace formula*