

NEAM 2

Friday October 13

On Friday morning, the conference packet pickup, the coffee breaks, and the early morning coffee and snacks are **between Lecture Center 19 and Lecture Center 20**.

8:15 - 9:00 Conference packet pickup / coffee / snacks

Lecture Center 20:

8:30 - 9:00 Addresses by the CAS Dean, Chair, and organizers

9:00 - 9:40 **Monica Visan**, UCLA

Almost sure scattering for the cubic NLS in four dimensions

9:50 - 10:30 **Murat Akman**, University of Connecticut

A Minkowski problem for nonlinear capacity

Coffee break

11:00 - 11:40 **Stefanie Petermichl**, University of Toulouse

On the matrix A_2 conjecture

11:50 - 12:30 **Lewis Coburn**, University at Buffalo, SUNY

Toeplitz quantization

Lunch

2:45-4:00 Parallel sessions

Coffee break near Lecture Center 4

4:30-7:00 Parallel sessions

Friday Parallel Session 1 is in **Lecture Center 4**

Friday Parallel Session 2 is in **Lecture Center 5**

Friday Parallel Session 3 is in **Lecture Center 6**

The Friday afternoon conference packet pickup and the coffee breaks are in the **Lecture Center corridor, near Lecture Center 4 and Argos Tea.**

Friday Parallel Session 1

2:45 - 3:05 **Josh Brummer**, Kansas State University

Bilinear operators with homogeneous symbols, smooth molecules, and Kato-Ponce inequalities

3:10 - 3:30 **Dong Dong**, University of Illinois at Urbana-Champaign

Hilbert transforms in a 3 by 3 matrix

3:35 - 3:55 **Gennady Uraltsev**, Cornell University

Uniform bounds for the bilinear Hilbert transform

4:00 - 4:30 Coffee break

4:30 - 4:50 **Almaz Butaev**, Concordia University

Some refinements of the embedding of critical Sobolev spaces into BMO

4:55 - 5:15 **Cezar Lupu**, University of Pittsburgh

Analytic aspects in the evaluation of multiple zeta values and multiple Hurwitz zeta values

Friday Parallel Session 2

2:45 - 3:05 **A. Shadi Tahvildar-Zadeh**, Rutgers University

General Relativity at the atomic scale

3:10 - 3:30 **Timur Akhunov**, State University of New York, Binghamton

When is Laplacian too degenerate to be laplacian?

3:35 - 3:55 **Zhenfu Wang**, University of Pennsylvania

Quantitative estimates of propagation of chaos for stochastic systems with $W^{-1,\infty}$ kernel

4:00 - 4:30 Coffee break

4:30 - 4:50 **Walton Green**, Clemson University

Harmonic analysis proof of the boundary observability for the wave equation

4:55 - 5:15 **Dawit Habte Gebre**, University of L'Aquila

Analysis of turbulent hydromagnetic flow with radiative heat over a moving vertical plate in a rotating system

5:20 - 5:40 **Marius Beceanu**, University at Albany, SUNY

New methods for the study of supercritical wave equations

5:45 - 6:05 **Petr Siegl**, University of Bern, Switzerland

Non-accretive Schrödinger operators and exponential decay of their eigenfunctions

6:10 - 6:30 **Jack Arbunich**, University of Illinois at Chicago

Regularizing nonlinear Schrödinger equations through partial off-axis variations

6:35 - 6:55 **Yunyun Yang**, University of West Virginia, Institute of Technology

Some subtleties in the relationships among heat kernel invariants, eigenvalue distributions, and quantum vacuum energy

Friday Parallel Session 3

2:45 - 3:05 **Meredith Sargent**, Washington University in St. Louis

Carlson's theorem for different measures

3:10 - 3:30 **Ievgen Bilokopytov**, University of Manitoba

Continuity and holomorphicity of symbols of weighted composition operators

3:35 - 3:55 **Hugo J. Woerdeman**, Drexel University

Complete spectral sets and numerical range

4:00 - 4:30 Coffee break

4:30 - 4:50 **Miron Bekker**, University of Pittsburgh at Johnstown

On roots of determinant of one class of holomorphic matrix-valued functions

4:55 - 5:15 **Kathryn McCormick**, University of Iowa

Riemann surfaces, holomorphic bundles, and boundary representations

5:20 - 5:40 **Bhupendra Paudyal**, Central State University

The lattices of invariant subspaces of a class of operators on the Hardy space

5:45 - 6:05 **Benjamin Russo**, University of Connecticut

A generalization of the Fock space

6:10 - 6:30 **Raffael Hagger**, Leibniz University Hannover

Compactness and essential spectra on bounded symmetric domains

6:35 - 6:55 **Roosbeh Gharakhloo**, Indiana University

On the asymptotics of Toeplitz+Hankel determinants

NEAM 2

Saturday October 14

The conference packet pickup, coffee breaks, and the early morning coffee and snacks are in the **Lecture Center corridor, near Lecture Center 4 and Argos Tea.**

8:30 - 9:00 Conference packet pickup / coffee / snacks

Lecture Center 4:

9:00 - 9:40 **Daniel Tătaru**, UC Berkeley

Energy-critical Yang–Mills

9:50 - 10:30 **Ben Dodson**, Johns Hopkins University

Global well-posedness and scattering for the cubic wave equation in three dimensions

Coffee break

11:00 - 11:40 **Guihua Gong**, University of Puerto Rico

On the classification of unital simple separable nuclear C^ -algebras*

11:50 - 12:30 **Mihai Putinar**, UC Santa Barbara

Positivity transformers

Lunch

2:10 - 2:50 **Eric Sawyer**, McMaster University

A two weight local Tb theorem for the Hilbert transform.

3:00-3:50 Parallel sessions

Coffee break

4:20-6:50 Parallel sessions

Saturday Parallel Session 1 is in **Lecture Center 4**

Saturday Parallel Session 2 is in **Lecture Center 5**

Saturday Parallel Session 3 is in **Lecture Center 6**

7:15 Banquet: **Patroon Room, Campus Center**

Saturday Parallel Session 1

3:00 - 3:20 **Azita Mayeli**, City University of New York, Queensborough and the Graduate Center

Orthogonal Gabor bases on finite vector spaces

3:25 - 3:45 **Pablo Jimenez-Rodriguez**, Kent State University

On some trivial (and not so trivial) inequalities for convex functions.

3:50 - 4:20 Coffee break

4:20 - 4:40 **Mihai Stoiciu**, Williams College

Bounds for the pseudospectra of various classes of matrices and operators

4:45 - 5:05 **Gabriel Prajitura**, State University of New York Brockport

Linear Chaos

5:10 - 5:30 **Anca Radulescu**, State University of New York at New Paltz

Template iterations of quadratic maps and hybrid Mandelbrot sets

5:35 - 5:55 **Tyler Bongers**, Michigan State University

Stretching and rotation sets of quasiconformal maps

6:00 - 6:20 **Lawrence Fialkow**, SUNY New Paltz

The core variety of a multisequence in the truncated moment problem

6:25 - 6:45 **Ivana Alexandrova**, University at Albany, SUNY

Semi-Classical-Fourier-Integral-Operator-Valued pseudodifferential operators and scattering in a strong magnetic field

Saturday Parallel Session 2

3:00 - 3:20 **Manki Cho**, Rochester Institute of Technology

Steklov eigenproblems and representations of electrostatics approximations of vector fields

3:25 - 3:45 **Lev Sakhnovich**,

The generalized scattering problems, ergodic type theorems

3:50 - 4:20 Coffee break

4:20 - 4:40 **Ebru Toprak**, University of Illinois at Urbana Champaign

Dispersive estimates for massive Dirac operators

4:45 - 5:05 **Razvan Teodorescu**, University of South Florida

Stochastic regularization of singularities in free boundary problems

5:10 - 5:30 **Xueying Yu**, University of Massachusetts Amherst

Global well-posedness and scattering for the quintic NLS in two dimensions

5:35 - 5:55 **Andrei Tarfulea**, University of Chicago

Improved estimates for thermal fluid equations

6:00 - 6:20 **Mengxia Dong**, University of Connecticut

Existence of extremal functions for higher order derivatives Caffarelli-Kohn-Nirenberg inequalities

6:25 - 6:45 **Jungang Li**, University of Connecticut

Concentration-compactness principles on the Heisenberg group and Riemannian manifolds

Saturday Parallel Session 3

3:00 - 3:20 **Javad Mashreghi**, Laval University

Some Preserver theorems in H^p Spaces

3:25 - 3:45 **Pan Ma**, Central South University (China)

Compactness of Toeplitz operators and Hankel operators on model spaces

3:50 - 4:20 Coffee break

4:20 - 4:40 **Muhammed A. Alan**, Syracuse University

Weighted polynomial hulls

4:45 - 5:05 **Arthur Parzygnat**, University of Connecticut

Categories in Probability

5:10 - 5:30 **Ruhan Zhao**, State University of New York, Brockport

On Berezin type operators and Toeplitz operators

5:35 - 5:55 **Hyun Kyoung Kwon**, University of Alabama

On the similarity of Cowen-Douglas operators

6:00 - 6:20 **Jianchao Wu**, Penn State University

Noncommutative dimensions and crossed product C^ -algebras.*

6:25 - 6:45 **Qijun Tan**, Penn State University

Asymptotic containment of representations and the spherical Plancherel formula.

NEAM 2

Sunday, October 15

The conference packet pickup, coffee breaks, and the early morning coffee and snacks are in a **Lecture Center corridor, near Lecture Center 4 and Argos Tea.**

8:30 - 9:00 Conference packet pickup / coffee / snacks

Lecture Center 4

9:00 - 9:40 **Raúl Curto**, University at Iowa

Toral and spherical Aluthge transforms

9:50 - 10:30 **Wilhelm Schlag**, University of Chicago

Structure theorems for intertwining wave operators in three dimensions

Coffee break

11:00 - 11:40 **Sergei Treil**, Brown University

Finite rank perturbations, Clark model, and matrix weights

11:50 - 12:30 **Francesco Di Plinio**, University of Virginia

Maximal averages and singular integrals along vector fields in higher dimension