

TexAMP 2020/21: Invited Talks

Friday, April 9

14:00-14:30: Participants sign in to Zoom. Welcome from organizers at 14:20.

14:30-15:30: Benjamin Schlein (University of Zurich)

16:00-17:00: Semyon Dyatlov (MIT)

Saturday, April 10

09:00-10:00: Mathieu Lewin (CEREMADE, Universite Paris Dauphine)

10:30-11:30: Nalini Anantharaman (Universite de Strasbourg)

14:00-17:25 Contributed Talks

Sunday, April 11

09:00-10:00: Manfred Einsiedler (ETH Zurich)

10:30-11:30: Dirk Hundertmark (Karlsruhe Institute of Technology)

11:30-12:15: Social Gathering

TexAMP 2020/21: Contributed Talks, Saturday April 10

Session 1

Location: Zoom breakout room 1

14:00-14:25

Gregory Berkolaiko, Texas A&M University

[Spectral shift via lateral perturbation](#)

14:30-14:55

Jonathan Harrison, Baylor University

[Periodic-orbit evaluation of a spectral statistic of quantum graphs without the semiclassical limit](#)

15:00-15:25

Jake Fillman, Texas State University

[Random Hamiltonians with arbitrary point interactions in one dimension](#)

15:30-15:55

Coffee break

16:00-16:25

Manki Cho, University of Houston – Clear Lake

[Steklov representation of harmonic functions with various boundary conditions](#)

16:30-16:55

Brian Simanek, Baylor University

[Electrostatics and zeros of orthogonal polynomials](#)

17:00-17:25

Giorgio Young, Rice University

[Orthogonal rational functions with real poles, root asymptotics, and GMP matrices](#)

Session 2

Location: Zoom breakout room 2

14:00-14:25

Amanda Young, TU Munich and MCQST

A non-vanishing spectral gap for a $1/3$ -filled fractional quantum Hall spin chain

14:30-14:55

David Mitrouskas, IST Austria

Weak coupling limit for the ground state energy of the 2D Fermi polaron

15:00-15:25

Vitali Vougalter, University of Toronto

Solvability of some integro-differential equations with concentrated sources

15:30-15:55

Coffee break

16:00-16:25

Michael Kiessling, Rutgers University

On the large-distance asymptotics of the ground state of the Schroedinger Newton aka Choquard equation

16:30-16:55

Joseph Miller, University of Texas at Austin

Derivation of Boltzmann's system for mixtures

17:00-17:25

Victor Vilaca Da Rocha, Georgia Institute of Technology

An analytical study of intermittency in turbulence through Riemann's non-differentiable functions

Session 3

Location: Zoom breakout room 3

14:00-14:25

Adrian Bustamante, Georgia Institute of Technology

[Gevrey estimates for asymptotic expansions of tori in weakly dissipative systems](#)

14:30-14:55

William Ott, University of Houston

[Quantization of fractal sets and measures in Banach spaces](#)

15:00-15:25

Ivan Ojeda-Ruiz

[An image inpainting via constrained smoothing and dynamic mode decomposition](#)

15:30-15:55

Coffee break

16:00-16:25

Baofeng Feng, UT Rio Grande Valley

[The dark and breather solutions for the Fokas-Lenells equation](#)

16:30-16:55

Thuyen Dang, University of Houston

[Homogenization of one-way coupled Stokes flow with paramagnetic inclusions](#)

17:00-17:25

Chaoqun Liu, University of Texas at Arlington

[Liutex and third generation of vortex definition and identification](#)