Iowa PDE Seminar

October 30, 2021

9:30 a.m. to 5:00 p.m.

205 Carver Hall

Department of Mathematics

Iowa State University

The mission of this meeting is to bring together experts and young researchers to discuss recent research advances in the field of partial differential equations.

Everyone interested in the theme of this seminar is welcome to attend.

Coffee/Pastries outside Carver 205 beginning at 9:30 a.m.

MORNING SESSION

Chair: Hailiang Liu

10:00 Welcome

10:10 Pelin Guven Geredeli
Iowa State University
Uniform decay of the solutions to a compressible Oseen-structure interaction PDE system

11:20 Xiaoyi Zhang
University of Iowa
Dynamics of threshold solutions for focusing nonlinear Schrodinger equation with inverse square potential

AFTERNOON SESSION

Chair: Paul Sacks and Tong Li

1:40 Pablo Raúl Stinga
Iowa State University
Harnack inequality for fractional nondivergence form elliptic equations

2:25 Lihe Wang
University of Iowa
Geometric theorems from capacity of domains

3:35 Jue Yan
Iowa State University
A new direct discontinuous Galerkin method with interface correction for two-dimensional compressible Navier-Stokes equations

4:20 Hailiang Liu
Iowa State University
Critical thresholds in Euler-Poisson-Alignment system with repulsive forcing.

For more information, see:
https://faculty.sites.iastate.edu/hliu/2021-iowa-pde-seminar
Organizers: Hailiang Liu, Tong Li, and Paul Sacks

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