**2022 Iowa PDE Conference Schedule**

**October 22, 2022, The University of Iowa, Iowa City, Iowa**

All lectures are in 110 Maclean Hall. Coffee breaks will be in Muhly Lounge (3 Maclean Hall).

* 9:00 AM-9:20 AM: **Registration & Coffee**
* 9:20 AM-9:30 AM: **Welcome: Weimin Han, Lihe Wang**

Chair: **Paul Sacks**

* 9:30 AM-10:10AM: **Hailiang Liu**

*Global dynamics and photon loss in the Kompaneets equation*

* 10:10AM -10:50 AM: **Seungjin Ryu**

*Gradient estimates for nonlinear elliptic double obstacles problems*

* 10:50 AM-11:10 AM: Group Photo and Coffee Break
* Chair: **Xiaoyi Zhang**
* 11:10 AM-11:50 AM: **Chongchun Zeng**

*Capillary Gravity Water Waves Linearized at Monotone Shear Flows: Eigenvalues and Inviscid Damping*

* 11:50 PM-12:30PM: **Hao Fang**

*A Liouville theorem for a class of fully non-linear equations*

* 12:30 PM-1:30 PM: **Lunch**

Chair: **Colleen Mitchell**

* 1:30 PM-2:10PM: **Yangyang Wang**

*Complex Bursting Patterns in Respiratory Neurons*

* 2:10 PM-2:50 PM: **Rana Parshad**

*Some recent results in two species competition*

* 2:50 PM-3:10 PM:  **Coffee Break**

Chair: **Hailiang Liu**

* 3:10 PM-4:40 PM: **Student/Post-doc Session**
  + 3:10 PM-3:25 PM: **Jose David Beltran Lizarazo**

*Global Lipschitz Continuous Solutions for a p-system with linear damping*

* + 3:25 PM-3:40 PM:  **Mitchell Haeuser**

*Nonlocal equations on the boundary*

* + 3:40 PM-3:55 PM: **Xiaokai Huo**

*Weak-strong uniqueness for Maxwell-Stefan systems*

* + 3:55 PM-4:10 PM: **Nitesh Mathur**

*Well-Posedness of BV Solutions to a System of Balance Laws Arising in Traffic Flow*

* + 4:10 PM-4:25 PM: **Bryanna Petentler**

*Compactness Method for Boundary Regularity of the Navier-Stokes Equation*

* + 4:25 PM-4:40 PM: **Vaibhava Srivastava**

*The effect of “fear” in two species competition*

* 6:00 PM-8:00 PM: **Dinner** at Big Grove Iowa City