



# PHYSICS COLLOQUIUM

The School of Natural Sciences  
Presents

**Undergraduate Research Symposium**  
Graduating seniors from the physics program

Friday, December 11, 2020

10:30 – 12:00 am

Online via Zoom

For zoom link email: [snsgradstaff@ucmerced.edu](mailto:snsgradstaff@ucmerced.edu)

Time: 10:45-10:57

Title: *Characterization of Optically Active Defects in Monolayer MoS<sub>2</sub>*

Authors: Kyle Shaw, Michael Scheibner

Time: 10:58-11:10

Title: *Doppler-shifted CQD Pair Emission for Improvement of Indirect Excitonic Linewidths*

Authors: Alejandro Arellano, Michael Scheibner

Time: 11:11-11:23

Title: *The development of vertices on a wing in a turbulent flow*

Authors: Adrian Estrella, Dustin Kleckner

Time: 11:24-11:36

Title: *Dipole-Dipole Interaction in InGaAs Quantum Dot Molecules*

Authors: Matthew Crawford, Michael Scheibner

Time: 11:37-11:50

Title: *Topological Entropy Calculation in 2D Fluid Flows using Limited-timed Tracer Particles*

Authors: Xiaolong Chen, Kevin Mitchell

For additional info contact Prof. Brian Utter [brianutter@ucmerced.edu](mailto:brianutter@ucmerced.edu)