



Program and Agenda

Fall Meeting of the Vibro-Acoustics Consortium May 19, 2022

NIU Naperville Conference Center
1120 E Diehl Rd
Naperville, IL 60563

8:00 a.m. Coffee and Pastries

8:30 a.m. Morning Presentations

- News and Notes
- **Tutorial** Overview of Energy Methods for Simulation
- Measurement of Flow Noise in Perforated Pipes
- Insertion Loss of Rectangular Ducts with Large Aspect Ratios
- Application of Acoustic Free Sources to Partial Enclosures
- Introduction to the Microflow Scan and Paint System
- Machine Learning Applied to End of Line Quality Testing
- Ray Tracing Analysis of a Reverberation Room
- Reduction of Noise from a Pool Heater

12:00 p.m. Lunch

1:00 p.m. Afternoon Presentations

- **Tutorial** Soundscapes
- Application of Machine Learning to Helmholtz Resonator Performance Predictions
- Statistical Energy Analysis Applied to an Air Handler
- Acoustic Simulation of Outlet Flow Noise
- Overview of the Foam-X Software
- Overview of ANSYS Acoustics
- Effect of Mass Layers on the Insertion Loss of Lined Rectangular Ducts
- Machine Learning Applied to Reverberation Room Simulation
- Multi-Inlet and Multi-Outlet Disk Silencers
- Simulation of Breakout Transmission Loss
- Development of a Test Stand to Investigate UAV Noise

4:00 p.m. Adjourn