

**Tuesday, September 10**

	<b>Orchard View Room</b> Vehicle Mobility Track	<b>Boardroom 2329</b> Direct Accelerated Geometry Monte Carlo ( <a href="#">DAGMC</a> ) Track	<b>Researcher's Link Room</b> Optimization and Machine Learning Track
7:30am-8:00am	Registration in Atrium		
8:00am-8:15am	<i>Welcome and Logistics</i> <a href="#">Professor Dan Negrut</a> , UW-Madison	NA	<i>Welcome and Logistics</i> <a href="#">Professor Victor Zavala</a> , UW-Madison
8:15am-9:00am	<i>Autonomous Vehicle Shuttle Project in the City of Madison</i> <a href="#">Jon Riehl</a> , Traffic Operations and Safety Laboratory, UW- Madison		<i>Advances and Opportunities in Machine Learning and AI in Process Industries</i> <a href="#">Leo Chiang</a> , Dow Chemical
9:00am-9:30am	Networking/Coffee Break in Atrium		
9:30am-10:15am	<i>Experimental and Modeling Capabilities for Off-road Mobility</i> <a href="#">Dr. Bohumir Jelinek</a> , Center for Advanced Vehicular Systems, Mississippi State University	<i>Welcome and Logistics</i> <a href="#">Professor Paul Wilson</a> , UW-Madison (15 min)	<i>AI and MPC for Building Systems</i> Kirk Drees, Johnson Controls
10:15am-10:45am	<i>Using Chrono to Assess Planetary Rover Performance: Validating the Soft-Sphere Model for Low-Gravity Granular Environments</i> <a href="#">Cecily Sunday</a> , ISAE- SUPAERO, Space Systems for Planetary Applications, France	<i>DAGMC Roadmap: Past to Future</i> Paul Wilson, <a href="#">Patrick Shriwise</a> , Argonne National Lab, and <a href="#">Andrew Davis</a> , UKAEA	<i>Optimization in Machine Learning and Control</i> <a href="#">Steve Wright</a> , UW-Madison
10:45am-11:00am	Networking/Coffee Break in Atrium		
11:00am-11:45am	<i>Sensor Simulation for Autonomous Vehicles and Robotics</i> <a href="#">Asher Elmquist</a> , UW-Madison	<i>DAGMC User Stories: Successes and Challenges</i> Speaker TBA	<i>Machine Learning for Modeling and Control of Complex Flows</i> <a href="#">Mike Graham</a> , UW-Madison
11:45am-12:00pm	<i>Overview of Master of Engineering Degree in Data Analytics</i> <a href="#">Wayne Pferdehirt</a> , UW-Madison		NA
12:00pm-12:45pm	<i>Project Chrono</i> <a href="#">Dr. Radu Serban</a> , UW-Madison		<i>Human-Centered Optimization</i> <a href="#">Brett Stewart</a> , ExxonMobil
12:45pm-2:00pm	Lunch Provided in Atrium		
2:00pm-2:45pm	<i>MPC Plus AI: A Strategy of Both</i> <a href="#">Bob Turney</a> , Engineering Fellow, Johnson Controls DeLuca Forum		
2:45pm-3:30pm	<i>Computational Frontiers in Atomistic Simulation: Exascale and Machine Learning</i> <a href="#">Tim Germann</a> , Theoretical and Applied Physics Division, Los Alamos National Lab DeLuca Forum		
3:30pm-3:45pm	Break		
3:45pm-4:30pm	<i>Active Learning in the Overparameterized and Interpolating Regime</i> <a href="#">Rob Nowak</a> , Professor of Electrical and Computer Engineering, UW-Madison DeLuca Forum		
4:30pm-6:30pm	Reception, Eckrose Poster Session and Career Fair in Atrium 6:15pm Presentation of Eckrose Innovation Poster Award Winners Bar and refreshments provided		
6:30pm-8:00pm	No-host Dinner at Steenbock's, Discovery Building For faculty, staff and industry		

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8:00am-8:30am	<i>Simulation-Based Engineering Lab (SBEL): Research and Highlights</i> <a href="#">Dan Negrut</a> , UW-Madison	NA	<i>Space-Time Data Analysis</i> <a href="#">Mihai Anitescu</a> , Argonne National Lab
8:30am-8:45am	<i>Multi-Phase Modeling and Simulation</i> <a href="#">Lijing Yang</a> , PhD Student, UW- Madison	NA	<i>Machine Learning in Molecular Dynamics Simulations</i> <a href="#">Reid Van Lehn</a> , UW- Madison
8:45am-9:00am	<i>Chrono::Granular</i> <a href="#">Nicholas Olsen</a> , PhD Student, UW-Madison	NA	
9:00am-9:15am	<i>Large-Step Integration for DEM Simulation</i> <a href="#">Luning Fang</a> , SBEL PhD Student, UW-Madison	<i>Understanding DAGMC User Workflow</i> Speaker TBA	<i>Machine Learning Algorithms for Sensor Design</i> Alexander Smith, UW- Madison
9:15am-9:45am	<i>SAE Autonomous EV Project</i> <a href="#">Aaron Young</a> , Undergraduate Student, UW-Madison		
9:45am-10:00am	Networking/Coffee Break in Atrium		
10:00am-10:30am	<i>Training Neural Networks to Control Robots using PyChrono</i> <a href="#">Simone Benatti</a> , University of Parma, Italy	<i>Understanding DAGMC User Workflow</i> Speaker TBA	<i>Low-Rank System Identification from High- Dimensional Data</i> <a href="#">Sungho Shin</a> , UW-Madison
10:30am-11:00am	<i>Fluid-Solid Interaction in Chrono</i> <a href="#">Milad Rakhsha</a> , PhD Student, UW-Madison	NA	<i>Optimization Methods for Real-Time Operations</i> <a href="#">Christos Maravelias</a> , UW- Madison
11:00am-11:30am	<i>Flexible Body Dynamics in Chrono</i> <a href="#">Mike Taylor</a> , PhD Student, UW- Madison	<i>DAGMC Community Development and Planning</i> Speaker TBA	<i>A Three-Stage Solution Algorithm for Chemical Production Scheduling</i> <a href="#">Ho Jae Lee</a> , UW-Madison
11:30am-12:00pm	<i>Trends in Hardware for Engineering Computing Industry; Overview of Supercomputer Euler</i> <a href="#">Colin Vanden Heuvel</a> , Sysadmin, Euler Supercomputer, UW-Madison		<i>Machine Learning in Materials Science</i> <a href="#">Dane Morgan</a> , UW-Madison
12:00pm-1:00pm	Lunch Provided in Atrium		

## TUTORIALS

Tutorial fees are included in the registration fee. Any registered participant can attend any of the tutorials. All tutorials will be held in the Mechanical Engineering (ME) Building, 1513 University Ave., Madison.

TIME	ITEM	SPEAKER	LOCATION
1:00pm Wednesday, September 11 through Friday, September 13	Project Chrono Tutorial	Radu Serban, Simone Benatti, Dan Negrut	Weds, Fri: ME 2188 Thurs: ME 2270
1:00pm Wednesday, September 11 through Thursday, September 12	<a href="#">Statistics: From Data to Models to Decision-Making</a>	<a href="#">Professor Victor Zavala</a> , UW-Madison	ME 2180
1:00pm-3:00pm Wednesday, September 11	<a href="#">DAGMC</a> Developers Tutorial/Hackathon and User Tutorials	TBA	ME 3210