

Wednesday, October 9

9:00 a.m. - 5:00 p.m. **Pre-Event - [Model-Based Development Symposium](#)**
 FCA, NAVAIR, University of Michigan, Enedym, University of Parma, and more!

4:30 p.m. - 7:00 p.m. **Welcome Reception - TopGolf at MGM Grand Detroit**

Thursday, October 10

7:30 a.m. - 8:30 a.m. **Registration/Breakfast/Networking**

8:30 a.m. - 8:45 a.m. **Welcome Address**
 Jason Napolitano - *Senior Vice President Americas*, Altair
[Salon 1 - 2](#)

8:45 a.m. - 9:30 a.m. **The Convergence of Simulation and Data**
 Jim Scapa - *Founder, Chairman, and Chief Executive Officer*, Altair
[Salon 1 - 2](#)

9:30 a.m. - 10:00 a.m. **Imagining a World that Works**
 Dr. Dayna Baumeister - *Co-founder*, Biomimicry 3.8
[Salon 1 - 2](#)

10:00 a.m. - 10:30 a.m. **Networking Break - Visit the Ask the Expert Pods, Altair Workflows, Sponsors, and Altair Partner Alliance**

10:30 a.m. - 11:15 a.m. **The Future of Decision Making**
 James Dagg - *Chief Technology Officer - Design and Simulation Solutions*, Altair
[Salon 1 - 2](#)

11:15 a.m. - 11:45 a.m. **Breaking Design Silos with Real-Time Collaboration**
 David Cohen - *Chief Engineer, NAWCAD Director, Systems Acquisition Group*, NAVAIR
[Salon 1 - 2](#)

11:45 a.m. - 12:15 p.m. **Empathetic Engineering**
 Naveed R. Parvez - *Chief Executive Officer*, Andiamo
[Salon 1 - 2](#)

12:15 p.m. - 1:15 p.m. **Lunch - Visit the Ask the Expert Pods, Altair Workflows, Sponsors, and Altair Partner Alliance**

CM Labs Simulations Garnet I	Lunch + Learn	DELL and Intel Garnet II	Lunch + Learn	Materialise Sapphire I	Lunch + Learn	nCode HBM Prensica Sapphire II	Lunch + Learn
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1:15 p.m. - 1:45 p.m. **Rapid Exploration and Development of Intelligent and Efficient Vehicle Architectures**
 James Truskin - *Technical Fellow - Body Adv. Architecture*, FCA
[Salon 1 - 2](#)

1:45 p.m. - 2:15 p.m. **Mobilizing Humanity in a New Way**
 Rob Miller - *Chief Marketing Officer*, Hyperloop Transportation Technologies
[Salon 1 - 2](#)

2:15 p.m. - 2:45 p.m. **Human Plus Machine: How Sarcos is Revolutionizing the Future of Work with Industrial Robotics**
 Chris Beaufait - *Executive Vice President and Chief Operating Officer*, Sarcos Robotics
[Salon 1 - 2](#)

2:45 p.m. - 3:00 p.m. **Altair and Oracle: At the Forefront of Engineering Simulation in the Cloud**
 Tejas Karmarkar - *Senior Principal Product Manager*, Oracle
[Salon 1 - 2](#)

3:00 p.m. - 3:30 p.m. **Networking Break - Visit the Ask the Expert Pods, Altair Workflows, Sponsors, and Altair Partner Alliance**

3:30 p.m. - 4:00 p.m. **AI and the Future of Product Lifecycles**
 Mamdouh Refaat - *Chief Data Scientist*, Altair
[Salon 1 - 2](#)

4:00 p.m. - 4:30 p.m. **Identifying and Capturing Business Growth Opportunities with Machine Learning**
 Carlos Eduardo Lopes - *Advanced Engineering Global Director*, Maxion Wheels
[Salon 1 - 2](#)

4:30 p.m. - 5:00 p.m. **Transformative Flight Transportation: Challenges Become Opportunities**
 Josh Elvander - *Vice President of Global Engineering*, Terrafugia
[Salon 1 - 2](#)

5:00 p.m. - 5:15 p.m. **Closing Remarks**
 Jason Napolitano - *Senior Vice President Americas*, Altair
[Salon 1 - 2](#)

5:15 p.m. - 8:30 p.m. **Networking Reception - Cocktails, live entertainment, and racing! Visit the Altair Race Track**

Friday, October 11

8:00 a.m. - 9:00 a.m.	Registration/Breakfast/Networking		
	Track 1: Getting Smarter <i>Salon 2</i>	Track 2: Accelerating Innovation <i>Salon 4</i>	Track 3: Future Powertrains <i>Salon 1</i>
9:00 a.m. - 9:20 a.m.	Simplifying Your Connected World – Enabling Connected Products Brian Peters, Altair	The Key Role of Simulation in Development of Aluminum Profiles and Study of Glass Structures in Shorter Design Time Gabriele Romagnoli, Faraone	An Efficient and Automated Design Strategy for Multi-physics E-motor Development Dr Lars Fredriksson, Altair
9:20 a.m. - 9:40 a.m.	Enabling Smart Buildings – Leveraging the Power and Breadth of IoT to Create Simple and Low Cost Smart Building Solutions Bryan Anderson, Altair	SimSolid for ACCRA Tooling Simulation Eric Gillund, Multimatic	Modeling the Thermal Runaway Behavior of Lithium Ion Batteries Upon Mechanical Abused Loading Richard Yen, Altair
9:40 a.m. - 10:00 a.m.	Data Driven Models for HVAC Load Prediction and Forecasting Angkit Choudhury, Altair	Piloting SimSolid for Fast Directional Feedback to Reduce Product Development Timelines Brendon Earl, CNH	Physics-based Cell and Pack Models for System Simulation John Milios, Sendyne and Andrew Dyer, Altair
10:00 a.m. - 10:20 a.m.	Smarter Ways for Optimizing Product Performance with the Help of Altair’s Digital Twin Platform Christian Kehrer, Altair	Machine Learning in 3D: Teaching Algorithms to Organize, Judge and Generate Parts Eamon Whalen, Altair	Using Machine Learning and Optimization to Develop E-motor Olcay Met, Altair
10:20 a.m. - 10:50 a.m.	Networking Break - Visit the Ask the Expert Pods, Altair Workflows, Sponsors, and Altair Partner Alliance		
	Track 1: Electrifying Everything <i>Salon 2</i>	Track 2: Multidimensional Thinking <i>Salon 4</i>	Track 3: Manufacturing Transformation <i>Salon 1</i>
10:50 a.m. - 11:10 a.m.	Optimized Energy Harvesting for Sustainable Smart Lighting Systems Efrain Gutierrez, Schneider Electric	The Role of FEA in the Development and Optimization of Novel Sports Head Protection John Cagle, VICIS	Driving Manufacturing Decisions with Machine Learning Alberto Ochoa, Ford Motor Company
11:10 a.m. - 11:30 a.m.	The Wahoo KICKR Bike: Designing a Ride Experience That Blurs the Line Between Virtual and Reality Anqi Sun, Altair	Get in the Groove with HPC Eric Morales, Ping	Nissan’s Approach on Advanced Manufacturing and Generative Design Dr. Nanzhu Zhao, Nissan North America
11:30 a.m. - 11:50 a.m.	Experience the Sound of Your Future EV Before it is Built David Bogema, HBK, Jamie Pears, Romax, Jianmin Guan, Altair	Product Development with a Multi-attribute, Single Model Workflow Parameswararao Pothuraju, Ford Motor Company	Component Design Optimization Using Response Surface Models for Laser Metal 3D Printing Dr. Robert Taylor, University of Texas at Arlington
11:50 a.m. - 12:10 p.m.	Meet Your Energy Efficiency Goals in Your Electrification Projects with Simulation Dr. Vincent Leconte, Altair	Expert Emulation in Crash Optimization Using Machine Learning Dr. Jonathan Ollar, Altair and Manish Pamwar, General Motors Canada	Virtual Design and Testing of a Medical Autoinjector Mahender Reddy and Ulrich Gollwitzer, Altair
12:10 p.m. - 1:25 p.m.	Lunch - Visit the Ask the Expert Pods, Altair Workflows, Sponsors, and Altair Partner Alliance		
12:10 p.m. - 1:25 p.m.	PART Engineering <i>Garnet I</i>	Lunch + Learn FEMFAT <i>Garnet II</i>	Lunch + Learn Phoenix Integration <i>Sapphire I</i>
	Lunch + Learn RAMDO <i>Sapphire II</i>	Lunch + Learn	Lunch + Learn
	Track 1: Power Up Wireless <i>Salon 2</i>	Track 2: Scale Up <i>Salon 4</i>	Track 3: Cool Fluids <i>Salon 1</i>
1:25 p.m. - 1:45 p.m.	Industrial IoT(IIoT) Networks Powered by 5G New Radio Amitabha Ghosh, Nokia Bell Labs	Benefits of Simulation Integration Into the Development Process of an Automotive Fuel Tank Dr. Hugues Massé, Plastic Omnium	Challenges Involved in Secondary Air Systems Modeling of a Gas Turbine Engine Mustafa Kocagul, TEI TUSAŞ Engine Industries Inc.
1:45 p.m. - 2:05 p.m.	Automotive Cellular Antenna Elevation Angle Study Leo Oh, General Motors	Engineering Jet Engines with OptiStruct, an Alternative for Rotordynamic Evaluation Illya Arcos, GE	Optimizing Powertrain Efficiency and Thermal Management for Improved Vehicle Performance and Energy Efficiency Dr. Konstantinos Karamolegkos, Romax
2:05 p.m. - 2:25 p.m.	The Unique Challenges of Automotive Antenna Design and Test John F. Locke, Ford Motor Company	Multiphysics Automated and Integrated Design Process Ken Singh & Surendra Gaikwad, FCA USA LLC	Empowering Aerodynamic Design Exploration – Volkswagen Group Research Case Study Dr. Bastian Schnepf, Altair
2:25 p.m. - 2:45 p.m.	Upcoming New Wireless Solutions and Applications, Including 5G Dr. Jordi Soler, Altair	HPC for Machine Learning and Machine Learning for HPC Dr. Fatma Kocer, Altair	Collaboration Between the Design Studio and Aerodynamics – the Future Dr. Paul Stewart, Altair