

Day 1 — Wednesday, 27 May 2026

7:30 AM Registration and Exhibit Hall Open

OPENING PLENARY

8:30 AM  
**Engineering Mobility Beyond Earth: Simulating Terrain and Reinventing Rover Wheels**  
 Dr. Heather Oravec – NASA Glenn Research Center

10:00 AM Networking Break in Exhibit Hall

Session 1 10:30 AM – 12:00 PM

Time	Room 101 1A – Manufacturing Process	Room 102 1B – Simulation Process and Data Management	Room 103 1C – Multiscale and Multiphysics	Room 105 1D – CFD	Jr Ballroom A 1E – Optimization	Jr Ballroom B 1F – Training Session	Jr Ballroom C 1G – Artificial Intelligence and Machine Learning	Jr Ballroom D 1H – Artificial Intelligence and Machine Learning 2	Prefunction N 1J – The NAFEMS Doctor Is In
10:30 AM	<b>Advances In Super Plastic Forming Simulations</b> Landon Henson · Boeing	<b>Enabling Digital Thread for Simulation: A PLM-Driven Framework to CAE Data Governance and Lifecycle Integration</b> Prasun Saha · Harsco Rail	<b>Accurate Simulation of a Hose with a Complex Reinforcing Outer Layer</b> Brant Ross · EnginSoft USA	<b>CFD plus FEA Applications in E-Vehicle Battery Chassis and BIW Development and Innovative Manufacturing Tooling Process</b> Wen Zhang · Magna International	<b>Leveraging Adjoint Methods for Fluids and Thermal Design Improvements: A Workflow Comparison</b> Christian Windisch · Siemens Digital Industries Software	<b>Dynamic Analysis Training</b> Tony Abbey · FETraining	<b>From Raw Data to Intelligent Decisions: Building AI-Ready Simulation Workflows</b> Prasad Mandava · Visual Collaboration Technologies Inc.	<b>Machine Learning-Enabled Prediction of Stress Response and Fatigue Life for a Parameterized Aerospace Lug</b> Jialun Han · Dassault Systemes	<b>The NAFEMS Doctor Is In</b>
11:00 AM	<b>Creation of a Digital Twin for an Electrically Melted Stonewool Furnace</b> Alex Lohse · Owens Corning	<b>Building a Data-to-Decision Backbone for Multidisciplinary CAE</b> Jacob Surber · Rescale	<b>Leveraging Mesh-Particle Multiphysics Simulation Technology to Enable LLM-based Engineering Workflows</b> James Crist · Dive CAE	<b>Accelerating BMW CFD Thermal Management Simulation</b> Ian Pegler · NVIDIA	<b>Calibration of Ground Vehicle Simulation Models</b> Peter Wang · Dassault Systèmes		<b>A Finite Element-Inspired Approach to Physics-Informed AI for Industrial Engineering Applications</b> Maya HTT	<b>A Comparative Study between Parametric and Historical Approach for Conceptual Roof Crush Surrogate Models</b> Johann Koshy · Dassault Systemes	
11:30 AM	<b>Simulation-Driven and AI-Enabled Layer Time Optimization for Large-Format Additive Manufacturing</b> Pum Kim · Oak Ridge National Laboratory	<b>A Unit of Assurance for Continuous Credibility in MBSE and Digital-Twin Simulation Workflows</b> Vishnu Viswanathan · George Washington University	<b>Thermal-Fluid and Structural Analysis of the Mini-Channel Beam Dump (MCBD)</b> Raul Quispe-Abad · Facility for Rare Isotope Beams	<b>Topology Optimization, Generative Design, and Additive Manufacturing in the Energy Sector: Lessons from Two Industrial Deployments</b> Andy Fine · Fine Physics LLC			<b>Accelerating Aerodynamic Simulation Workflows Through AI-Driven Predictive Modeling and Real-Time Hyper-Realistic Visualization</b> Palash Waghmare · Synopsys		

12:00 PM Networking Lunch in Exhibit Hall

**AFTERNOON  
PLENARY**

1:00 PM

**Pacing with the Exponential Progress of AI in the Food CPG Industry**

Garrett Swindlehurst – General Mills

2:00 PM

Networking Break in Exhibit Hall

**Session 2 2:30 PM – 5:00 PM**

Time	Room 101 2A – Manufacturing Process 2	Room 102 2B – Simulation Process and Data Management 4	Room 103 2C – Optimization 2	Room 105 2D – CFD 2	Jr Ballroom A 2E – Simulation Driven Design	Jr Ballroom B 2F – Training Session	Jr Ballroom C 2G – Artificial Intelligence and Machine Learning 3	Jr Ballroom D 2H – Artificial Intelligence and Machine Learning 4	Prefunction N 2J – The NAFEMS Doctor Is In
2:30 PM	<b>Improving Integrated Circuit Advanced Packaging Manufacturability with Thermomechanical Simulation</b> Tyler Ferris · Synopsys	<b>Streamlined and Semi-Automated FEA Workflow for Pipeline Integrity Assessment</b> Pier-Olivier Duval · Ametek-Creafom	<b>A Physics-Informed, Data-Driven Framework for Resistance Spot Welding Performance Prediction and Optimization in Multi-Sheet BEV Joints</b> Zhendan Xue · ESTECO North America, Inc.	<b>Using Computational Fluid Dynamics to Assess and Optimize Laboratory Ventilation</b> Cassidy Strode · Chemistry and Industrial Hygiene	<b>An Advanced Finite Element Analysis Methodology For Well Integrity Assessment Under Geomechanically-Induced Loads From The Reservoir Compaction Effect</b> Georgiy Makedonov · VIAS3D	<b>Applications of Probabilistic Analysis for Decision Making Training</b> David Riha · Southwest Research Institute	<b>AI-Driven Multi-Material Lattice Design and Optimization for Automotive Bumper Energy Absorbers</b> Pum Kim · Oak Ridge National Laboratory	<b>Agent-Driven Workflows in Engineering Simulation: Augmenting the Analyst in the Age of Autonomous Systems</b> Evan Kay · Navier AI	<b>The NAFEMS Doctor Is In</b>
3:00 PM		<b>Bridging the Gap: A Review of Engineering Simulation Interoperability</b> Hubertus Tummescheit · Model Based Innovation LLC	<b>Balancing Engineering Criteria and Human Expertise in Musical Horn Optimization</b> Yan Pozhanka · New Mexico Tech	<b>Full-Fidelity Aeroacoustic Simulation at Industrial Scale: A GPU-Native LES Architecture and Its Implications for Automotive, Turbomachinery and Propulsion Applications</b> Andy Fine · Fine Physics LLC	<b>Comparative Studies of Traditional Structural Design Optimization vs AI</b> Jami Shah · The Ohio State University		<b>Taming the Data Deluge: Storage Strategies for AI-Powered CAE Simulations</b> Rod Mach · TotalCAE	<b>A Generic Virtual Twin Workflow For Semiconductor Packaging: Real-Time AI/ML Prediction Grounded By High-Fidelity CAE</b> Zhenxiang Jiang · Dassault Systemes	
3:30 PM	<b>Stress Based FLD Approach for Accurate Failure Prediction in Multi-Step Sheet Metal Forming and Hydroforming: Validated Through FEA Simulation and Experimentation</b> Nilesh Gajjar · Caterpillar Inc.		<b>Industry Examples of More Simulations in Less Time with Abstract Model powered SimAgents</b> Davis Evans · Novus Nexus	<b>Modeling Fuel-Water Separation Downstream of Coalescing Media</b> Adithya Gurumurthy · Donaldson Company Inc	<b>Finite Element Based Structural Assessment Of A Marine Terminal Fuel Storage Tank Under Fire And Blast Loading</b> Kevin Hayes · Genesis/Technip Energies		<b>SHIFT-Crash: A Physics AI Model for Full-Vehicle Crashworthiness Prediction</b> Riddhiman Raut · Luminary		
4:00 PM	<b>ESTECO Sponsor Workshop</b>	<b>Smarter Testing, Better Models: Moving Beyond Standards for Material Model Calibration</b> Mark Oliver · Veryst Engineering LLC	<b>Techsoft3D Sponsor Workshop</b>	<b>GoEngineer Sponsor Workshop</b> Manish Barlingay · GoEngineer	<b>Total Materia Sponsor Workshop</b>			<b>HPC Unleashed: Overcoming CAE Simulation Bottlenecks with On-Prem, Cloud, GPU &amp; AI</b>	

5:00 PM

Networking Reception

## Day 2 — Thursday, 28 May 2026

7:30 AM Registration and Exhibit Hall Open

**MORNING  
PLENARY**

**8:30 AM**  
**Accelerating Industrial Engineering: From Product Design to Manufacturing in the AI Supercomputing Era**  
 John Linford – NVIDIA

10:00 AM Networking Break in Exhibit Hall

**Session 3 10:30 AM – 12:00 PM**

Time	Room 101 3A – Simulation Quality Assurance	Room 102 3B – Electromagnetics	Room 103 3C – WG Roundtable Discussion	Room 105 3D – Simulation Driven Design 2	Jr Ballroom A 3E – Simulation Process and Data Management 3	Jr Ballroom B 3F – Training Session	Jr Ballroom C 3G – Artificial Intelligence and Machine Learning 5	Jr Ballroom D 3H – Artificial Intelligence and Machine Learning 6	Prefunction N 3J – The NAFEMS Doctor Is In
10:30 AM	<b>When "Simple" Isn't: Lessons from an Accidental Benchmark of a Cantilever Beam</b> Gregory Westwater · Emerson	<b>Electromagnetic Co-existence at Full-Vehicle Fidelity: A Compressed Full-Wave Method of Moments Approach for Multi-System Antenna Analysis</b> Andy Fine · Fine Physics LLC	<b>Engineering Data Science WG Roundtable Discussion</b>	<b>Thermal Runaway Simulations for Optimal Vent Selection in EV Batteries</b> Rohit Yadav · Donaldson Company, Inc.	<b>Toward a Consistent, Physics Grounded Development of Full Nonlinear Stress-Strain Curves for Aerospace Metals</b> G Robert Bennett · Gulfstream Aerospace	<b>Fatigue and Fracture Mechanics Training</b> Tony Abbey · FETraining		<b>AI-Driven Modeling of Coolant Channel Flow and Thermal Behavior for Battery Module Design</b> Devadatta Mukutmoni · Dassault Systeme	<b>The NAFEMS Doctor Is In</b>
11:00 AM	<b>Effect of Finite Element Type and Shape on In-Plane and Out-of-Plane Bending Stiffness</b> Brett Soltz · The Aerospace Corporation	<b>Considering New Green Function Methods as an Adjunct/Alternative to FDTD in Silicon Nanophotonics Simulation</b> Luke Voss · Mathematical Systems & Solutions, Inc.		<b>Simulation-Informed, Data-Driven Surrogate Model for Ball Impact Assessment of a Cell Phone Assembly</b> Pouya Shojaei · Synopsys	<b>Enhancing Workflow Quality and Efficiency for Dynamic Matching Parameter Optimization Tool</b> John Mersch · Sandia National Laboratories		<b>Statistical Validation of Geometry and Input-Space Coverage for AI Surrogates in 3D Physics Simulation</b> Felipe Mercado · Synopsys, Inc	<b>AI Model Driven Optimization</b> Dheeraj Vemula · Luminary Cloud	
11:30 AM	<b>How to Start Your VVUQ Journey (You've Probably Started Already)</b> Gregory Westwater · Emerson	<b>Quantifying The Impact Of Eccentricity, Rotor Tilt, And Magnetization Variability On Electric Drive Unit NVH</b> SMT		<b>Quantifying Structure-Borne Noise Risk Using a NVH Scorecard for Tractor Cab Suspension</b> Sachidanand Sasidharan · John Deere	<b>From Simulation to Strategy: Aligning Digital Engineering with Workforce &amp; Decision Intelligence</b> Darrell Moon · Orriant			<b>Comparing Human, AI, and Hybrid Human-in-the-Loop Workflows for Vibration-Based Fault Diagnosis in Rotating Machinery</b> Asparuh Stoyanov · Key Ward GmbH	

12:00 PM Networking Lunch in Exhibit Hall

**PANEL**

**1:15 PM**  
**Panel Discussion: Defining the Next Era of Simulation**

2:45 PM Networking Break in Exhibit Hall

Session 4 3:15 PM – 5:00 PM

Time	Room 101 4A – Simulation Engineering Supported Topics	Room 102 4B – Structural Dynamics	Room 103 4C	Room 105 4D – Simulation Driven Design 3	Jr Ballroom A 4E – Simulation in Food and Drink	Jr Ballroom B 4F – Training Session	Jr Ballroom C 4G – Artificial Intelligence and Machine Learning 7	Jr Ballroom D 4H – Artificial Intelligence and Machine Learning 8	Prefunction N 4J – All About NAFEMS - Q&A; Session
3:15 PM	<b>Polymer Testing and Constitutive Modeling Applied to FE Simulation of Blow Molding Processes</b> Sean Teller · Veryst Engineering	<b>Efficient Approach to Fatigue Analysis for Nonlinear Loads in Combination With Long Time Histories for a Hook Coupling</b> Rajivgandhi Kaveri · MAGNA Powertrain of America Inc.		<b>Accelerating Product Development Through Simulation</b> Alistair Gill · Element Digital Engineering Ltd	<b>Heated Lance Design for a THC Oil Spray</b> Kathleen Brown · Spraying Systems Co.	<b>Nonlinear Analysis Training</b> Tony Abbey · FETraining	<b>Physics, AI and the Simulation Frontier: A Technical Assessment of Where the Boundaries Are Actually Moving</b> Andy Fine · Fine Physics LLC	<b>Accelerating Structural Assessment via Physics-Constrained ML: Singularity-to-Fillet Stress Mapping</b> Yan Pozhanka · New Mexico Tech	<b>All About NAFEMS - Q&amp;A; Session</b>
3:45 PM	<b>Tekprenticeship: Infusing Engineering Education with Job-Ready Skills Informed by Contemporary Industry Applications</b> Anthony Petrella · FEA Professional Graduate Program	<b>Structural Interactions in Rotor Dynamics Analysis</b> Kate Walgren · Collins Aerospace			<b>Mooving Forward: Inspiring Cow Comfort with Cutting-Edge CFD Technology</b> Ken Mansfield · Seneca Dairy Systems		<b>From Tools to Agents: How Agentic Engineering Workflows Are Reshaping Simulation-Driven Product Development</b> Nolan Halliday · SimScale		
4:15 PM	<b>RVE and FEA Analysis of Tibial Implants</b> Georgiy Makedonov · VIAS3D	<b>FEA Approach for Equivalent Static Modes</b> Tim G. Hunter · Wolf Star Technologies, LLC		<b>What is Upfront Simulation?</b> Nathan Wieland · Caterpillar Inc.	<b>Enabling Industrial Digital Twins through Reality Capture, 3D Modeling, and Discrete-Event Simulation in Consumer Goods Manufacturing</b> Jim Topich · Kinetic Vision		<b>Simulation as Infrastructure for the AI Era: Enabling Autonomous Engineering Workflows</b> Neel Kumar · Intact Solutions, Inc.	<b>From Silos to Scale: An Industrial Workflow for Integrating and Deploying Physics-based Surrogate Models on a Universal Engineering Data Platform</b> Asparuh Stoyanov · Key Ward GmbH	

Optional – Boeing James S. McDonnell Prologue Room Tour – Pre-booking essential

Day 3 — Friday, 29 May 2026

7:30 AM Registration and Exhibit Hall Open

MORNING  
PLENARY

8:30 AM  
IV&V; at The Aerospace Corporation in Support of U.S. Space Force Programs  
Brett Soltz – The Aerospace Corporation

9:30 AM Networking Break in Exhibit Hall

Session 5 10:00 AM – 11:30 AM

Time	Room 101 5A – Simulation Driven Design 4	Room 102 5B – Systems Modeling and Simulation	Room 103 5C – Simulation Engineering Supported Topics 2	Room 105 5D – Durability and Damage Tolerance	Jr Ballroom A 5E – Structural Dynamics 2	Jr Ballroom B 5F – Training Session	Jr Ballroom C 5G – Artificial Intelligence and Machine Learning 9	Jr Ballroom D 5H – Artificial Intelligence and Machine Learning 10	Prefunction N 5J – The NAFEMS Doctor Is In
10:00 AM	<b>Implicit, Generated, Printed: Why Modern Geometry Demands a New Analysis Paradigm</b> Neel Kumar · Intact Solutions, Inc.	<b>Quantifying Simulation ROI Through Usage Data: Lessons from Formula One-Style Constraints</b> David Boyle · Open IT, Inc.	<b>Simulation For Compliance/Certification in Industrial Applications</b> Dr. Terrence Alger · UL Solutions	<b>Ductile Metallic Material Stress-Strain Curve Modeling and Practical Results Interpretation for Aerospace Nonlinear Elastic-Plastic FEA</b> Travis Stephens · Benny Aero LLC	<b>Introduction to Drop Test Impact Analysis</b> Randy Bailey · DJH Engineering Center	<b>Testing and Modeling of Polymers for Solid Mechanics Simulations</b> Sean Teller · Veryst Engineering LLC	<b>SHIFT-Battery: A Physics-AI Model for Optimizing Battery Pack Cold Plates</b> Saakaar Bhatnagar · Luminary	<b>Physics and Geometry Aware Generative AI for Engineering Design Exploration</b> Matt Ellis · Neural Concept	<b>The NAFEMS Doctor Is In</b>
10:30 AM	<b>Integrated Modeling and Simulation Approach for Bipolar Plate Flow Channel Design, Optimization and Design for Manufacturing</b> Qiyong Chen · Dassault Systemes	<b>Nuclear Waste Processing Management Using Discrete Event Simulation</b> Steven Huston · DBD International	<b>Integrating Meshing-Free Isogeometric Analysis Into Existing Finite Element Solvers</b> Christopher Whetten · Coreform Inc	<b>FEM Based Tire Wear Estimation Technique for Commercial Vehicles Using PHM Approach</b> Gyuhee Kim · Hyundai Motor Company	<b>Redesign of a Legacy Ejection Seat Using Explicit Dynamics FEA to Mitigate Spinal Injury Risk</b> Pier-Olivier Duval · Creaform		<b>Reducing RFQ Design Optimization Time in E-Machine Development Through Governed Surrogate Modeling Workflows</b> Filippo Boscolo Fiore · Key Ward GmbH	<b>Soon Every Second Engineer Will be an AI Agent: Where Can You Harness Their Real Added Value?</b> Ram Seetharaman · Synera GmbH	
11:00 AM	<b>Chemical Mechanical Planarization (CMP) Process Modeling Using Finite Element Analysis</b> Ramil Tanov · Dassault Systemes		<b>Effect of Shell-to-Solid Element Connection Method on In-Plane and Out-of-Plane Bending Stiffness</b> Brett Soltz · The Aerospace Corporation	<b>Kinetic Theory Strength of Materials</b> Alex Oudovikine · STEDAX Inc.			<b>From Raw Data to Intelligent Decisions: Powering Next-Generation Engineering Simulation with Automated AI-Ready Pipelines</b> Prasad Mandava · Visual Collaboration Technologies Inc.	<b>Multi Agent Systems For Finite Element Analysis</b> Rui Aguiar · Cosmon	

11:30 AM Closing Session and Raffle

