

Day 1 — Wednesday, 27 May 2026

7:30 AM Registration and Exhibit Hall Open

PLENARY

8:30 AM
Welcome
 Tim Morris – NAFEMS

KEYNOTE

9:15 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 1	Room 102 1B – Simulation Process and Data Management 1	Room 103 1C – Multiscale and Multiphysics	Room 105 1D – CFD 1	Jr Ballroom A 1E – Optimization 1	Jr Ballroom B 1F – Training Session	Jr Ballroom C 1G – Artificial Intelligence and Machine Learning 1	Jr Ballroom D 1H – Artificial Intelligence and Machine Learning 2	Prefunction N 1J – How to Navigate Your NAFEMS Membership
10:30 AM	Advances In Super Plastic Forming Simulations Landon Henson · The Boeing Company	Enabling Digital Thread for Simulation: A PLM-Driven Framework to CAE Data Governance and Lifecycle Integration Prasun Saha · Harsco Rail	Accurate Simulation of a Hose with a Complex Reinforcing Outer Layer Brant Ross · EnginSoft USA	CFD plus FEA Applications in E-Vehicle Battery Chassis and BIW development and Innovative Manufacturing Tooling Process Wen Zhang · Cosma	Leveraging Adjoint Methods for Fluids and Thermal Design Improvements: A Workflow Comparison Christian Windisch · Siemens Digital Industries Software	Dynamic Analysis Training Tony Abbey · FETraining	From Raw Data to Intelligent Decisions: Building AI-Ready Simulation Workflows Prasad Mandava · Visual Collaboration Technologies, Inc.	Machine Learning'Enabled Prediction of Stress Response and Fatigue Life for a Parameterized Aerospace Lug Jialun Han · Dassault Systemes SIMULIA Corp	How to Navigate Your NAFEMS Membership Craig Fahrenholz · NAFEMS Ltd.
11:00 AM	Simulation-Driven and AI-Enabled Layer Time Optimization for Large-Format Additive Manufacturing Bhagya Prabhune · Oak Ridge National Laboratory	A Unit of Assurance for Continuous Credibility in MBSE and Digital-Twin Simulation Workflows Vishnu Viswanathan · George Washington University	Leveraging Mesh-Particle Multiphysics Simulation Technology to Enable LLM-based Engineering Workflows James Crist · Dive Engineering Software, Inc	Accelerating BMW CFD Thermal Management Simulation Ian Pegler · NVIDIA	Calibration of Ground Vehicle Simulation Models Peter Wang · Dassault Systemes SIMULIA Corp		A Finite Element-Inspired Approach to Physics-Informed AI for Industrial Engineering Applications Derek Peeling · Maya HTT	A Comparative Study between Parametric and Historical approach for Conceptual Roof Crush Surrogate Models Johann Koshy · CST of America (a Dassault Systemes Simulia Company)	
11:30 AM			Thermal-Fluid and Structural Analysis of the Mini-Channel Beam Dump (MCBD) Raul Quispe-Abad · Facility for Rare Isotope Beams (FRIB)	Optimization of Oil Immersion Quenching Process Using 3D CFD Simulation Shanmugasundaram Chandrakesan · AVL - Simulation Technologies	Topology Optimization, Generative Design, and Additive Manufacturing in the Energy Sector: Lessons from Two Industrial Deployments Andy Fine · Fine Physics LLC		Accelerating Aerodynamic Simulation Workflows Through AI-Driven Predictive Modeling and Real-Time Hyper-Realistic Visualization Palash Waghmare · Synopsys	CognaSIM Presentation John Zinn · CognasIM	

12:00 PM Networking Lunch in Exhibit Hall

PLENARY 1:00 PM
The Whys and Hows of the Professional Simulation Engineer Certification
 Travis Stephens – Gulfstream Aerospace

KEYNOTE 1:15 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 2	Room 103 2C – Optimization 2	Room 105 2D – CFD 2	Jr Ballroom A 2E – Simulation Driven Design 1	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 – How to Navigate Your NAFEMS Membership
2:30 PM	Improving Integrated Circuit Advanced Packaging Manufacturability with Thermomechanical Simulation Tyler Ferris · Ansys, Inc.	Streamlined and Semi-Automated FEA Workflow for Pipeline Integrity Assessment Pier-Olivier Duval · Creaform	A Physics-Informed, Data-Driven Framework for Resistance Spot Welding Performance Prediction and Optimization in Multi-Sheet BEV Joints Zhendan Xue · ESTECO North America, Inc.	Using Computational Fluid Dynamics to Assess and Optimize Laboratory Ventilation Cassidy Strode · Chemistry & Industrial Hygiene, Inc.	An Advanced Finite Element Analysis Methodology For Well Integrity Assessment Under Geomechanically-Induced Loads From The Reservoir Compaction Effect Georgiy Makedonov · VIAS3D	Applications of Probabilistic Analysis for Decision Making Training David Riha · Southwest Research Institute	AI-Driven Multi-Material Lattice Design and Optimization for Automotive Bumper Energy Absorbers Bhagya Prabhune · Oak Ridge National Laboratory	Agent-Driven Workflows in Engineering Simulation: Augmenting the Analyst in the Age of Autonomous Systems Evan Kay · Navier AI	How to Navigate Your NAFEMS Membership Craig Fahrenholz · NAFEMS Ltd.
3:00 PM	Stress Based FLD Approach for Accurate Failure Prediction in Multi-Step Sheet Metal Forming and Hydroforming: Validated Through FEA Simulation and Experimentation Nilesh Gajjar · Caterpillar, Inc.	Bridging the Gap: A Review of Engineering Simulation Interoperability Hubertus Tummescheit · Model Based Innovation LLC	Balancing Engineering Criteria and Human Expertise in Musical Horn Optimization Yan Pozhanka · New Mexico Institute of Mining and Technology	Full-Fidelity Aeroacoustic Simulation at Industrial Scale: A GPU-Native LES Architecture and Its Implications for Automotive, Turbomachinery and Propulsion Applications Andy Fine · Fine Physics LLC	Comparative Studies of Traditional Structural Design Optimization vs AI Jami Shah · The Ohio State University		Taming the Data Deluge: Storage Strategies for AI-Powered CAE Simulations Rod Mach · TotalCAE	A Generic Virtual Twin Workflow For Semiconductor Packaging: Real-Time AI/ML Prediction Grounded By High-Fidelity CAE Zhenxiang Jiang · Dassault Systemes SIMULIA Corp	
3:30 PM		Preserving and Applying Simulation Expertise: A Knowledge-Vault Architecture for CAE Organizations Omar Ibrahim · Process Optimization Corporation	Industry Examples of More Simulations in Less Time with Abstract Model powered SimAgents Davis Evans · Novus Nexus	Modeling Fuel/Water Separation Downstream of Coalescing Media Adithya Gurumurthy · Donaldson Company, Inc.	Finite Element Based Structural Assessment Of A Marine Terminal Fuel Storage Tank Under Fire And Blast Loading Kevin Hayes · Genesis/Technip Energies		SHIFT-Crash: A Physics AI Model for Full-Vehicle Crashworthiness Prediction Riddhiman Raut · Luminary	Comparing Human, AI, and Hybrid Human-in-the-Loop Workflows for Vibration-Based Fault Diagnosis in Rotating Machinery Asparuh Stoyanov · Key Ward GmbH	
4:00 PM	Agentic AI: Democratizing Simulation Workflows and Insights Nachiket Kasarekar · ESTECO North America, Inc.	Smarter Testing, Better Models: Moving Beyond Standards for Material Model Calibration Mark Oliver · Veryst Engineering LLC	Getting Started with HOOPS for CAE Hunter Guerin · Tech Soft 3D	Designing the Perfect Fireman Helmet with 3D Scanning, Reverse Engineering, Lattice Generation, Structural Analysis and 3D Printing - Who is GoEngineer & Our Advanced Simulation Team Matthew Sherak · GoEngineer	Accelerating AI-First Engineering: Agentic Workflows, AI Physics, and Compute Optimization for Modern R&D; Bernardo Mendez · Rescale	Manufacturing Process Simulation Chris Abada · Dassault Systemes SIMULIA Corp	Total Materia Sponsor Workshop	HPC Unleashed: Overcoming CAE Simulation Bottlenecks with On-Prem, Cloud, GPU & AI Rod Mach · TotalCAE	

5:00 PM Conference Dinner Reception & Bar

Day 2 — Thursday, 28 May 2026

7:30 AM Registration and Exhibit Hall Open

PLENARY
8:30 AM
Housekeeping
 Bel Hooley – NAFEMS

PLENARY
8:45 AM
The NAFEMS ASSESS Initiative – An Update
 Nick Appleyard – NAFEMS

PLENARY
9:05 AM
HALO Overview
 Addison Snell – Intersect360 Research

KEYNOTE
9:15 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 – W/G 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 – How to Navigate Your NAFEMS Membership
10:30 AM	When "Simple" Isn't: Lessons from an Accidental Benchmark of a Cantilever Beam Gregory Westwater · Emerson	Electromagnetic Co-existence at Full-Vehicle Fidelity: A Compressed Full-Wave Method of Moments Approach for Multi-System Antenna Analysis Andy Fine · Fine Physics LLC	How to Embed AI/Machine Learning into Engineering Workflow with Confidence	Scaling Simulations with Automation: A Modeling Tool for EV Battery Vent Selection Rohit Singh · Donaldson Company, Inc.	Toward a Consistent, Physics Grounded Development of Full Nonlinear Stress/Strain Curves for Aerospace Metals G Robert Bennett · Gulfstream Aerospace Corporation	Fatigue and Fracture Mechanics Training Tony Abbey · FETraining	Big Questions (and Answers) about the AI Market Addison Snell · Intersect 360 Research	AI-Driven Modeling of Coolant Channel Flow and Thermal Behavior for Battery Module Design Devadatta Mukutmoni · DS Americas Corp.	How to Navigate Your NAFEMS Membership Craig Fahrenholz · NAFEMS Ltd.
11:00 AM	Effect of Finite Element Type and Shape on In-Plane and Out-of-Plane Bending Stiffness Brett Soltz · The Aerospace Corporation	Considering New Green Function Methods as an Adjunct/Alternative to FDTD in Silicon Nanophotonics Simulation Luke Voss · Mathematical Systems & Solutions, Inc.		Simulation-Informed, Data-Driven Surrogate Model for Ball Impact Assessment of a Cell Phone Assembly Pouya Shojaei · Synopsys	Enhancing Workflow Quality and Efficiency for Dynamic Matching Parameter Optimization Tool John Mersch · Sandia National Laboratories		All About NAFEMS - Q&A; Session	AI Model Driven Optimization Dheeraj Vemula · Luminary	
11:30 AM	How to start your VVUQ journey (You've probably started already) Gregory Westwater · Emerson	Quantifying The Impact Of Eccentricity, Rotor Tilt, And Magnetization Variability On Electric Drive Unit NVH Andrew Lawton · Smart Manufacturing Technology Limited		Quantifying Structure-Borne Noise Risk Using a NVH Scorecard for Tractor Cab Suspension Sachidanand Sasidharan · John Deere Waterloo	An AI-First Architecture for CAE: From Simulation Data to Engineering Intelligence at Inference Speed Jacob Surber · Rescale UK/Europe Office			Simulation as Infrastructure for the AI Era: Enabling Autonomous Engineering Workflows Neel Kumar · Intact Solutions, Inc.	

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 – All About NAFEMS - Q&A; Session	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 – How to Navigate Your NAFEMS Membership
3:15 PM	Polymer Testing and Constitutive Modeling Applied to FE Simulation of Blow Molding Processes Sean Teller · Veryst Engineering LLC	Efficient Approach to Fatigue Analysis for Nonlinear Loads in Combination With Long Time Histories for a Hook Coupling Rajivgandhi Kaveri · Magna Powertrain Driveline	All About NAFEMS - Q&A; Session	Accelerating Product Development Through Simulation Alistair Gill · Element Materials Technology	Heated Lance Design for a THC Oil Spray Kathleen Brown · Spraying Systems Co	Nonlinear Analysis Training Tony Abbey · FETraining	Physics, AI and the Simulation Frontier: A Technical Assessment of Where the Boundaries Are Actually Moving Andy Fine · Fine Physics LLC	Accelerating Structural Assessment via Physics-Constrained ML: Singularity-to-Fillet Stress Mapping Yan Pozhanka · New Mexico Institute of Mining and Technology	How to Navigate Your NAFEMS Membership Craig Fahrenholz · NAFEMS Ltd.
3:45 PM	Tekprenticeship: Infusing Engineering Education with Job-Ready Skills Informed by Contemporary Industry Applications Anthony Petrella · FEA Professional Graduate Program	Structural Interactions in Rotor Dynamics Analysis Kate Walgren · Collins Aerospace			Mooving Forward: Inspiring Cow Comfort with Cutting-Edge CFD Technology Ken Mansfield · Seneca Dairy Systems		From Tools to Agents: How Agentic Engineering Workflows Are Reshaping Simulation-Driven Product Development Nolan Halliday · SimScale GmbH	From Silos to Scale: An Industrial Workflow for Integrating and Deploying Physics-based Surrogate Models on a Universal Engineering Data Platform Asparuh Stoyanov · Key Ward GmbH	
4:15 PM	RVE and FEA Analysis of Tibial Implants Georgiy Makedonov · VIAS3D	FEA Approach for Equivalent Static Modes Tim G. Hunter · Wolf Star Technologies		What is Upfront Simulation? Nathan Wieland · Caterpillar, Inc.	Enabling Industrial Digital Twins through Reality Capture, 3D Modeling, and Discrete-Event Simulation in Consumer Goods Manufacturing Jim Topich · Kinetic Vision		On Strategy For Innovation Of Numerical Simulation With AI Peter Langsten · Predict change	Zero Time Lost: Practical Agentic AI for Engineering Teams Ram Seetharaman · Synera Technologies Inc	

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

PLENARY

8:30 AM
Housekeeping
 Bel Hooley – NAFEMS

KEYNOTE

8:45 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
10:00 AM	Implicit, Generated, Printed: Why Modern Geometry Demands a New Analysis Paradigm Neel Kumar · Intact Solutions, Inc.	Quantifying Simulation ROI Through Usage Data: Lessons from Formula One Style Constraints Heinrich Bartels · Open IT	Simulation For Compliance/Certification in Industrial Applications Dr. Terrence Alger · UL Solutions	Ductile Metallic Material Stress-Strain Curve Modeling and Practical Results Interpretation for Aerospace Nonlinear Elastic-Plastic FEA Travis Stephens	Redesign of a Legacy Ejection Seat Using Explicit Dynamics FEA to Mitigate Spinal Injury Risk Pier-Olivier Duval · Creaform	Testing and Modeling of Polymers for Solid Mechanics Simulations Sean Teller · Veryst Engineering LLC	SHIFT-Battery : A PhysicsAI Model for Optimizing Battery Pack Cold Plates Saakaar Bhatnagar · Luminary	Physics and Geometry Aware Generative AI for Engineering Design Exploration Matt Ellis · Neural Concept	
10:30 AM	Integrated Modeling and Simulation Approach for Bipolar Plate Flow Channel Design, Optimization and Design for Manufacturing Qiyong Chen · DS Americas Corp.	Nuclear Waste Processing Management Using Discrete Event Simulation Steven Huston · DBD International	Integrating Meshing-Free Isogeometric Analysis Into Existing Finite Element Solvers Christopher Whetten · Coreform LLC	FEM Based Tire Wear Estimation Technique for Commercial Vehicles Using PHM Approach Gyuhee Kim · Hyundai Motor Company	Introduction to Drop Test Impact Analysis Randy Bailey · DJH Engineering Center, Inc.		Reducing RFQ Design Optimization Time in E-Machine Development Through Governed Surrogate Modeling Workflows Filippo Boscolo Fiore · Key Ward GmbH	Soon Every Second Engineer Will be an AI Agent: Where Can You Harness Their Real Added Value? Ram Seetharaman · Synera Technologies Inc	
11:00 AM	Chemical Mechanical Planarization (CMP) Process Modeling Using Finite Element Analysis Romil Tanov · Dassault Systemes SIMULIA Corp		Effect of Shell-to-Solid Element Connection Method on In-Plane and Out-of-Plane Bending Stiffness Brett Soltz · The Aerospace Corporation	Meshing Strategy Studies for vibration induced Fatigue screening and comparing with the Steinberg Method for PCB Components Derek Peeling · Maya HTT			From Raw Data to Intelligent Decisions: Powering Next-Generation Engineering Simulation with Automated AI-Ready Pipelines Prasad Mandava · Visual Collaboration Technologies, Inc.	Multi Agent Systems For Finite Element Analysis Rui Aguiar · Cosmon, Inc	

11:30 AM Closing Session and Raffle

