

## Monday, May 19

Dassault Systèmes SIMULIA is delighted to be the Platinum Sponsor at the NAFEMS World Congress 2025. We have an experienced team of simulation specialists at the event and we hope you have chance to connect with them at our booth and listen to their presentations.

14.45 | Plenary



**Gregor Judex**, SIMULIA Worldwide  
Industry Consultant Director

17.45 | Track 1G  
Automotive



**Svetlana Jeronimo**  
Accelerated Headlight Defrost using  
Modelling and Simulation

## Tuesday, May 20

11.05 | Track 2  
Business Impact



**Srikrishna Chittur, Jose Pereiras**

Streamlining Development of Customized Machines for Underground Mining with Unified Modelling & Simulation, presented on behalf of Resemin

11.25 | Track 2B  
AI Assisted Optimisation



**Anand Pathak**

Thickness Optimization of a Fuel Tank Using ML Based Physics Model

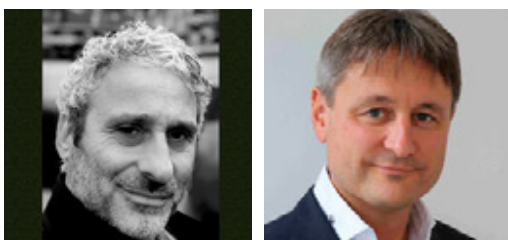
11.25 | Track 2E  
Acoustic Simulation



**Svetlana Jeronimo**

Deep Learning Surrogate Models for Fan Performance and Acoustic Assessment

13.00 | Track A  
Platinum Sponsor Session 1



**Joe Amodeo, Gregor Judex**

MODSIM: The Importance of Being Unified

18.05 | Track 4C  
Simulating the Welding Practice



**Anand Pathak**

Numerical Analysis of Laser Welding Parameters to Enhance Battery Tab Strength and Reliability

Wednesday, May 21

10.30 | Track D  
Platinum Sponsor Session 2



**Srikrishna Chittur, Svetlana Jeronimo, Benedikt Koenig**

From IDEA to PRODUCT: SIMULIA Fluids Portfolio for Designers and Analysts to Accelerate Product Innovation

11.15 | Track 5E  
Optimisation 1



**Pratik Upadhyay**

Unified Non-Parametric Optimization of Multiple Design Variable Types

11.35 | Track 5E  
Optimisation 1



**Anton Jurinic**

Enhanced Non-Parametric Topology-, Shape- and Sizing-Optimization using Non-Linear Structural Modelling

13.55 | Track 6G  
Cosimulation



**Bruno Passone**

MBS - FEA Co-Simulation Approach Applied to a Coupled Vehicle-Tire in an Abuse Loading Application

14.15 | Track 6B  
Data Based Modelling



**Benedikt Koenig**

Empowering Syringe Designers to Assess Device Performance with Physics-based Machine Learning Models

15.45 | Track 7G CFD  
Supporting Design



**Srikrishna Chittur**

Cross-wind Aerodynamic Analysis of Electric Cargo Scooter Designs using the Unified Modelling and Simulation Approach, presented on behalf of Revolta Motors Pvt Ltd

16.25 | Track 7G CFD  
Supporting Design



**Claus Pedersen**

A High-Fidelity, Multi-Disciplinary Framework for Wind Turbine Aero-acoustic and Vibro-acoustic Noise Reduction

18.05 | Track 8B  
CAE in the Design Process



**Janne Ranta**

Democratizing a Box Compression Test of a Corrugated Fiberboard Package

Thursday, May 22

09.25 | Track 9A  
Generative Design



**Claus Pedersen**

Multiphysics Optimization for  
Electrical Machines Considering  
Multiple Operation Points

10.05 | Track 9D  
Aero Optimisation



**Alejandro Martinez Navarro**

Tire Wake Analysis through Unsteady  
Aerodynamics Simulations

11.55 | Track 10F  
Code Coupling



**Tobias Bernarding**

Revolutionizing Engineering Analysis  
with Automated Electromagnetic and  
Structural Simulation Workflows

Visit our exhibition booth or reach out to our Sales & Technical experts via LinkedIn:



**Stephanie Bailey-Wood**

SIMULIA Advocacy Marketing Director



**Christian Barthel**

SIMULIA Sales Director, EuroCentral



**Alfredo Lorenzo**

Spatial Senior Client Executive



**Jose Pereiras**

SOLIDWORKS Industry Process  
Senior Consultant

## Sponsor sessions

### 13.00 | Track A Platinum Sponsor Session 1

#### [Joe Amodeo, Gregor Judex](#)

##### **MODSIM: The Importance of Being Unified**

MODSIM is radical approach used by Dassault Systèmes to unify Modelling & Simulation. At a fundamental level, this is implemented by a unified modelling and simulation data model (MODSIM)—but this has far reaching consequences that we shall explore here. For example, it is possible to create advanced applications that can blur the lines between modelling and simulation to create new types of product development paradigms. An example of this is an application to design and validate conceptual structural models, such as those used in automotive body in white and aircraft airframe design. What makes this application remarkable is that it can produce accurate detailed validation results, from a simplified model, and it can make design changes in seconds that would take days or weeks with traditional methods—this, and other examples such as generative design will be explained and highlighted with real world examples.

In addition, the integration of MODSIM within the wider **3DEXPERIENCE®** platform presents significant opportunities to leverage the “Digital Thread” of this relation-based ecosystem to build a comprehensive Test Management & Simulation Data Management solution. This “Continuous Simulation Management” solution will be explored, with examples of how it’s scope and performance go well beyond traditional SPDM approaches. Not only does the implementation of these solutions lead to massive efficiency, traceability, and robustness improvements, it produces highly structured and organized MODSIM (Model & Simulation) data sets—which are perfect for training machine learning algorithms, where the results predictions can be accessed using the exact same MODISM technology.

### 10.30 | Track D Platinum Sponsor Session 2

#### [Srikrishna Chittur, Svetlana Jeronimo, Benedikt Koenig](#)

##### **From IDEA to PRODUCT: SIMULIA Fluids Portfolio for Designers and Analysts to Accelerate Product Innovation**

In today’s fast-paced product development landscape, accelerating innovation while reducing development costs remains a critical challenge. This technical session will explore how Dassault Systèmes’ SIMULIA brand empowers mechanical designers and simulation experts to transform ideas into high-performing products with its comprehensive Computational Fluid Dynamics (CFD) simulation software portfolio. This session will showcase the core capabilities and key value propositions of the SIMULIA Fluids portfolio to drive smarter design decisions from concept to product.

We will highlight the design-embedded simulation capabilities of SIMULIA’s CFD solutions—spanning from early-stage design exploration to high-fidelity analysis—that enable rapid design iterations, minimize reliance on physical prototyping, and optimize flow and thermal performance. Attendees will discover how SIMULIA CFD solutions such as the Fluid Dynamics Engineer Role, PowerFLOW, XFlow, and the Plastic Injection Engineer Role can empower engineering teams with efficient fluid and thermal simulation workflows across diverse industries including automotive, aerospace, industrial equipment, high tech, and life sciences.