REVOLUTION in simulation

News & Events About Engineering Simulation

Fall 2020

[Revolution in Simulation](#) is an industry initiative for educating, advocating, collaborating, and innovating to make the use of engineering simulation technologies not just more capable and efficient for the CAE expert, but more accessible and reliable for non-experts – what we call "The Democratization of Simulation". [Rev-Sim.org](#) provides expertly curated resources through an open community platform to share the latest industry [news](#), [events](#), [case studies](#), [blogs](#), [whitepapers](#), [webinars](#), [best practices](#), [consultant advice](#), and [solutions providers](#) to help democratize simulation for the benefit of faster and more robust development cycles.
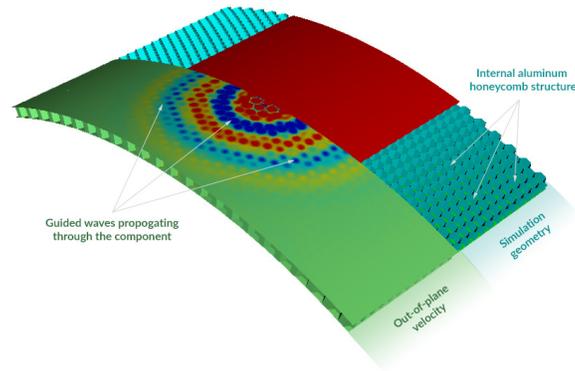
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Please help build the Democratizing Simulation community by forwarding this newsletter to a colleague or your followers. It's that easy.

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Webinar: How Polytec uses Cloud-Based HPC for Virtual Non-Destructive Testing using Finite Element Analysis of Elastic Wave Propagation

Wednesday, September 30
4:00 PM (UK), 11:00 AM (Eastern US), 8:00 AM (Pacific US)

Join us for a webinar on the Finite Element Analysis (FEA) of elastic wave propagation for Non-Destructive Testing (NDT). Modern manufacturing techniques and complex materials pose highly challenging inspection scenarios that make engineering simulation essential to their development.

A case study from Polytec, a provider of advanced 3D laser interferometry measurements capture and visualization of ultrasonic inspections, will show how cloud-based FEA provided the accuracy to simulate traveling wave measurement across a thin plate and crack detection.

Information & Registration

Case Study: Preventing Well Blowouts

To understand what kept emergency devices from deploying fully during an offshore well catastrophe, researchers turned to Ansys Mechanical and Ansys Fluent to model fluid–structure interactions. The result of this landmark work has the potential to change the regulatory framework for blowout preventers and is helping manufacturers better ensure the integrity of their products.

Read the case study here.

What's New

Generative Design
Generative Design is a broad and holistic design methodology that includes all goal-driven and computational approaches to engineering where software is used to generate geometry based on a set of logical operations and user-defined rules.

Rev-Sim Leadership Interview
We recently spoke to Dr. Sam Saltiel, Chief Communications Officer of Rev-Sim sponsor Beta CAE Systems, to ask how his career began in engineering simulation and why he chose to participate in the Revolution in Simulation.

Recorded Webinars!

Its been a busy past few months for webinars - and we have quite a collection! Presented in cooperation with a number of the industry's leading authorities, these educational webinars are developed to explore the enabling technologies, challenges, rewards, and present-day examples for implementation.

Our Newest Sponsors

SOLIDWORKS® offers complete 3D software tools that let you create, simulate, publish, and manage your data. SOLIDWORKS Simulation provides easy-to-use structural analysis capabilities, fully embedded within SOLIDWORKS, for predicting a product's real-world physical behavior by virtually testing CAD models. The SOLIDWORKS portfolio of simulation solutions offers everything designers need for linear, nonlinear, static, and dynamic analysis. For more challenging simulations the 3DEXPERIENCE WORKS portfolio provides connected, powerful and collaborative simulation solutions on the cloud with full SOLIDWORKS data associativity.

Future Facilities is a software company dedicated to building a better future for the data center industry. To this end, we are pioneering the use of the Digital Twin as a new methodology for the design and management of data centers. We have developed the 6Sigma suite of simulation software products to virtualize all things data center, including the full spectrum of IT equipment (i.e. 6SigmaET) as well as the infrastructural elements.
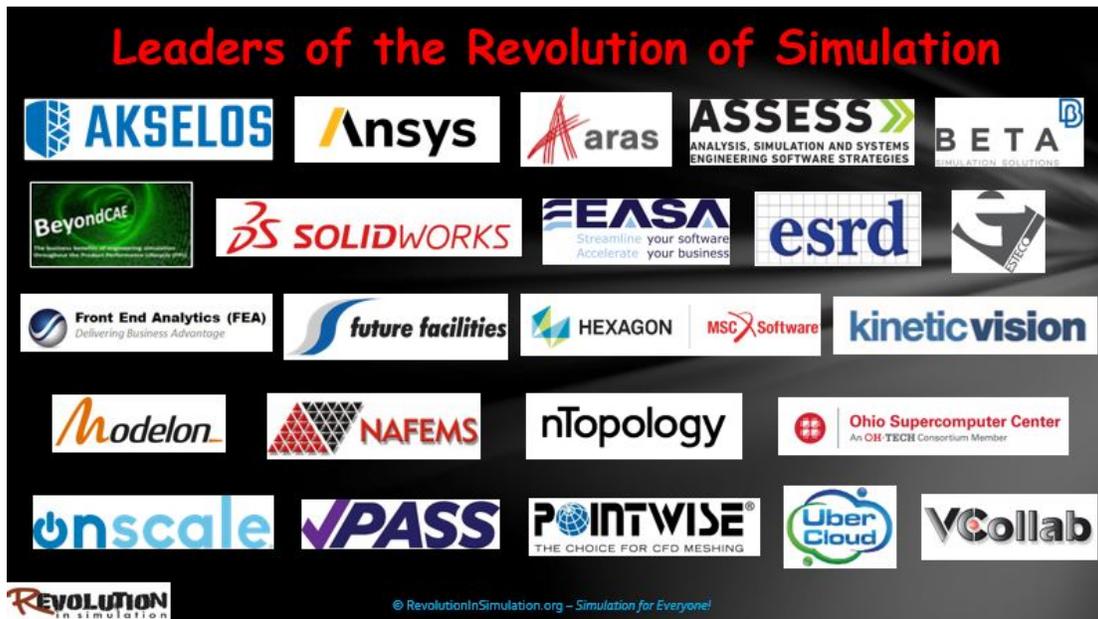

Hexagon | MSC Software develops simulation software technology that enables engineers to validate and optimize designs using virtual prototypes. Manufacturers in virtually every industry use this software to enhance or even replace the physical prototype 'build and test' process that has traditionally been used in product design and engineering.

Each sponsor is a technology thought leader that offers software or services which make simulation not only more capable and powerful for the expert, but also more usable and reliable for the new user or non-CAE specialist.

Our Sponsors

Sponsor Spotlight

ESTECO is an independent software provider, highly specialized in numerical optimization and simulation data management with a sound scientific foundation and a flexible approach to customer needs. With 20 years' experience, the company supports leading organizations in designing the products of the future, today.

Our smart engineering suite brings enterprise-wide solutions for design optimization, simulation data management and process integration and automation. We help companies excel across this innovation journey, providing leading-edge technology to master engineering complexity and accomplish the shift to agile product development.

Learn More

Webinar Recording: Model-Based Engineering - How Critical is Simulation to a Model-Based Enterprise?

Systems thinking, model-based concepts and simulation methods and processes are closely connected. The support of pervasive engineering analysis & simulation technologies are vital in making these concepts feasible. This webinar will examine how these concepts interact and how the resulting benefits are critical to the enterprise.

View Recording

Upcoming Events

Engineering Innovation in Driveline Design: Rapid Transmission Modeling & Analysis Using Romax Concept
September 17

Webinar: Enhancing Additive Designs for Bike Grips using nTop Platform
September 22

Webinar: Generative Design Powered by Embedded Intelligence – The Next Design Frontier?
September 23

Webinar: CAE-Led Design & Structural Simulation of Electro-Mechanical Drive Systems with Romax Enduro & MSC Nastran
September 29

Webinar: End-to-End Powertrain NVH Simulation, Analysis, & Optimization with Romax Spectrum & Actran
September 30

Webinar: How Polytec uses Cloud-Based HPC for Virtual Non-Destructive Testing using Finite Element Analysis of Elastic Wave Propagation
September 30

Webinar: Mechanical Property Predictions of Additive Manufactured Microstructures via Surrogate Modeling
October 17

VMAP International Conference on CAE Interoperability 2020
October 15-16: Munich (Germany)

See More

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