

invitation

NA

NORTH AMERICAN

Regional Summit

2008

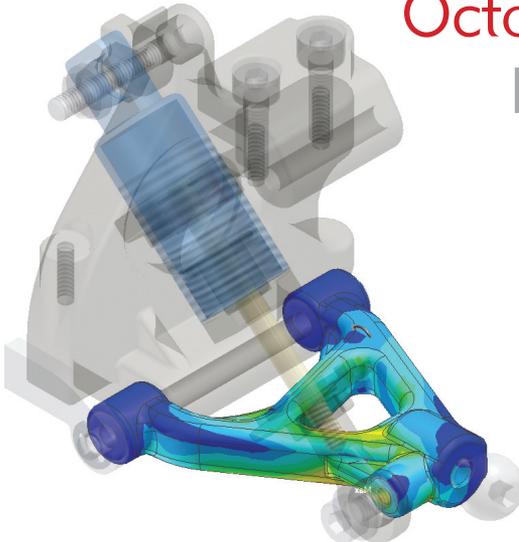


NAFEMS

2020 Vision of Engineering Analysis and Simulation

October 29-31 | 2008

Hampton, Virginia



- Business Benefits
- Designer Analysis
- Education
- High Performance Computing (HPC)
- Interoperability
- Multiphysics
- Non-deterministic Analysis
- Manufacturing
- Practical Applications
- Simulation Data Management (SDM)

www.nafems.org/nafems2020

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NAFEMS North American 2008 Regional Summit

NAFEMS, the premier global organization dedicated to the advancement and improvement of engineering simulation, is hosting **NAFEMS 2020** in Hampton, Virginia during October 29-31, 2008 to bring together the leading visionaries, developers, and practitioners of CAE-related technologies and business processes to share relevant trends and roadmaps, to explore common themes, and to address these issues in an open forum. The goal is to provide attendees with the best "food for thought and action" to deploy CAE over the next several years.

A vision of CAE's potential in 2020 has many facets associated with maximizing the value of using engineering analysis and simulation in addressing the ever-increasingly complexity of products and their life cycles. **NAFEMS 2020** will include keynote speakers, exhibits, and breakout sessions exploring the following subjects:

- **Business Developments**
- **Technical Developments**
- **Human Issues**
(i.e. training and education aligned with a 2020 vision)

Who Should Attend

We would like to invite CAE end users, visionaries, researchers, educators, industry managers, and CAE software and hardware developers. Come share your experience and viewpoints to help shape the future of CAE in maximizing its impact on tomorrow's design environment, or come listen and learn what directions CAE will be moving over the next several years and how it can help your organization. The event is open to both members and non-members of NAFEMS. Attendance is free for NAFEMS members, subject to sufficient remaining seminar credits.

Optional Training Course

October 27th - October 28th 2008

Finite Element Model Validation, Updating, and Uncertainty Quantification for Linear and Non-linear Models for Aerospace, Civil and Mechanical Engineers

F. Hemez, Los Alamos National Laboratory (LANL)

WEDNESDAY - OCTOBER 29TH - 2008

Opening of the Conference

T. Morris, NAFEMS CEO

Welcome to NAFEMS 2020

R. Dreisbach, The Boeing Company and Chairman of NAFEMS NA Steering Committee

Keynote Speaker: Pathway to Future CAE Technologies & Their Role in Ambient Intelligent Environments

A. Noor, Old Dominion University

Keynote Speaker: Isogeometric Analysis: Progress and Challenges

T. Hughes, University of Texas at Austin

Expanding Engineering Analysis Tools to Biomedical Applications: Using an Example of Nasal Airflow in Patients with Septal Deviations

B. Barnum and M. Cragun, OSS

Realizing Simulation Data Management Interoperability Across Domains

A. Schreiber, PROSTEP

A Quasi Steady Approach to the Thermal Stress Analysis in a One-Way FSI

R. Pillai, OWI

Dynamics of Social Systems – Analysis and Design

T. Doherty, Tommy Concepts

The Case for Simulation Lifecycle Management

P. Lalor, SIMULIA

A Multiphysics Approach to Tyre Noise Prediction

S. Panigrahi, Cranes Software

Failure Analysis of Composite Structures using Multicontinuum Technology: A Mesh Sensitive Study
D. Robbins Jr., Firehole Technologies, Inc.

Future Breakthroughs in Creating, Managing and Analyzing Simulation Data for Near-Real Time Decision Making

J. Evans, Engineous

How Modern Software Methodologies and High Performance Computing will Change the Face of Simulation

E. Dodd, IBM and J. Lyon, Simudyne

Uncertainty Quantification for the Orion Crew Exploration Vehicle Thermal Protection System using Cielo and Dakota

J. Schiermeier, NASA JPL

Simulation and the Creative Process – A New Paradigm

U. Schramm, Altair Engineering

Modeling of Materials – Getting to a Smaller Scale

R. Yancey, Altair Engineering

Uncertainty Structure Matrix for Models and Simulations

L. Green, NASA LaRC

Why Design Analysis Works – Confessions of a Former Analysis Snob

V. Adams, SolidWorks

Simulation of Particulate Solids Handling and Processing Operations Using the Discrete Element Method

D. Scharpf, DEM Solutions (USA), Inc.

Hypothesis Testing of Finite Element Models using Load Uncertainty Probability Density Functions
J. Sundermeyer, Caterpillar, Inc.

Quality Improvements and their Impact in a Lean CAE "Future World"
M. Zebrowski, Ford (Retired)

Fracture, Damage and Progressive Failure Analysis of Composite Materials

S. Choudhry, MSC.Software

Simulation-Supported Decision Making

G. Allen, Decision Incite

Using Concurrent Engineering to Drive Electro-Optical Sensor Product Development

D. Thomas, The Aerospace Corporation and M. Panthaki, Comet Solutions

Direct Coupled-Field Elements for Multiphysics Simulation

S. Scampoli, ANSYS

Stochastic Simulation of Aircraft Cabin Interior Considering Uncertain Load Conditions by Modeling with Random Fields

D. Vogt, EADS Innovation Works

Designer Analysis: Utopia or Catastrophe?

R. Keene, CATIA Simulation

Efficient Multi-physics Modeling of the Dynamic Response of RF-MEMS Switches

D. Ostergaard, ANSYS

THURSDAY - OCTOBER 30TH - 2008

Keynote Speaker: Integrated Computational Materials Engineering

M. Boyce, M.I.T.

Keynote Speaker: Hybrid Engineering Enablers: Technology, Process and People Perspective

T. Abe, Ford Motor Company

Product Performance Simulation in 2020

M. Halpern, Gartner

The Next Revolution in Simulation

J. Leuridan, LMS

US Navy Validation of Computational Tools to Meet Future Requirements

J. Grimsley, US Naval SWC

Unified FEA

K. D'Souza, SIMULIA

Advances in Element Technology: Solid-Shell Element

D. Conover, ANSYS

"Get it Right the First Time" with Simulation-Based Design

T. Weninger, ESI Group

Fatigue and Fracture Analysis – "On the Fly"

E. Punch, Punch Software Solutions

T-Splines and Isogeometric Analysis: A New Design-Through-Analysis Paradigm

M. Scott, University of Texas at Austin

Modeling Bolted Connections for Stress Analysis

M. Tomlin, SIEMENS

Simulation Training Challenges in the 2020 Workplace

N. Veikos, CAE Associates, Inc.

Case Study: How to Make an Analysis Interface that Both the Novice and the Expert will Use

T. Cunningham, Micro Motion, Inc.

D. Hensley, ATA Engineering, Inc.

New Frontiers in CAE Interoperability

A. Chinn, ITI TranscenData

Issues Facing Engineering Simulation: A CAE Providers Perspective

D. Conover, ANSYS

Virtual Prototyping – An Analyst's Dream: Progress Challenges and Future Path to 2020

S. Choudhry, MSC.Software

The Role of Digital Simulation in Developing a PLASVEE® for 2020

*R. Dreisbach, L. Krueger, J. Vandeventer, The Boeing Company
(Ballrooms B and C)*

FRIDAY - OCTOBER 31ST - 2008

Keynote Speaker: MCAE Opportunities and Markets: A Fresh Look at a Shifting Landscape

J. Orr, Cyon Research

The Future Directions of Simulation: One Career Person's Vendor-oriented View

D. Nagy, CD-adapco and Member of the NAFEMS NA Steering Committee

Vendor Forum

For more information on the vendor forum, including a list of individuals/companies participating, please visit:

www.nafems.org/nafems2020/forum/

NAFEMS WRAP-UP AND CLOSURE

Venue

Hampton Roads Convention Center

1610 Coliseum Drive, Hampton, VA 23666

Toll Free Number: (866) 484-4722



Situated between beautiful Virginia Beach and historic Colonial Williamsburg, the Hampton Roads Convention Center provides access to all of the Hampton Roads communities. The hotel is in the heart of the city's Coliseum Central Business District, home to the area's best dining, shopping and entertainment. Just minutes from Langley Air Force Base, Fort Monroe Army Base, Busch Gardens, Virginia Air and Space Museum and the Coliseum Mall, the hotel provides easy access to everything the region has to offer.

Hotel Accommodation

NAFEMS 2020 registrants can reserve a discounted room at the Embassy Suites Hotel, which is physically connected to the Hampton Roads Convention Center. To make a reservation, registrants should call 1-757-827-8200. The group code for the NAFEMS 2020 discount is: NAF. The negotiated room rate for this event is \$119/night¹ (plus tax).

¹Special Note: A large number of rooms have been held for conference attendees until September 28th, 2008. After this date, all rooms being held will be released. Please be sure to make your reservation prior to this date to ensure you have a room for this event.

Airports

PHF - Newport News/Williamsburg International Airport

10 miles / 16 minutes driving time to HRCC/Embassy Suites

ORF - Norfolk International Airport

18 miles / 25 minutes driving time to HRCC/Embassy Suites

Conference Committee

Mr. Tom Curry	LMS, International	Mr. Edward Ladzinski	IBM
Dr. Rodney L. Dreisbach	The Boeing Company	Dr. Dennis Nagy	CD-adapco
Dr. David Hibbitt	Founder, HKS Inc. (now Simulia)	Dr. Ahmed Noor	Old Dominion University
Dr. Daniel Inman	Virginia Tech	Dr. Bijan Khatib-Shahidi	Ford Motor Co.

Sponsorship

There are several outstanding opportunities available for your company to sponsor or exhibit at the conference, giving you maximum exposure to a highly targeted audience of delegates, who are all directly involved in simulation, analysis, and design.

So what are the benefits of sponsoring and exhibiting at the conference?

- Promote your company to a large but highly focused group of individuals who have a pre-qualified interest in your product
- Establish important contacts within the industry
- Increase your company's visibility and standing in the analysis community
- Showcase your latest product releases and service offerings
- Discover exactly what your target market needs from you, and what trends are emerging across the industry.

Please visit www.nafems.org/events/nafeoms/2008/naregionalsummit/partner/ for further details and to book.

