NAFEMS North American 2008 Regional Summit, October 29-31, 2008 - Hampton, Virginia

Keynote	PLASVEE© Project
Track 1 – Ballroom B	Vendor Forum
Track 2 – Ballroom C	Breaks/Lunches
Track 3 – Rooms 202 & 203	Special Activities

Agenda

Monday, October 27, 2008

8:00 am – 5:00 pm	**Training Course: Finite Element Model Validation, Updating, and Uncertainty Quantification for Linear and Non-linear Models for Aerospace, Civil and Mechanical Engineers (*optional*)**[1] F. Hemez, Los Alamos National Laboratory (LANL)

Tuesday, October 28, 2008

8:00 am – 5:00 pm	**Training Course: Finite Element Model Validation, Updating, and Uncertainty Quantification for Linear and Non-linear Models for Aerospace, Civil and Mechanical Engineers (*optional*)**[1] F. Hemez, Los Alamos National Laboratory (LANL)
1:00 pm – 6:00 pm	Registration

[1] *This is an optional training course which requires separate registration.*

Wednesday, October 29, 2008

7:00 am – 4:00 pm		Registration		
7:15 am – 8:00 am	Exhibits Open	Light Breakfast		
8:00 am – 8:10 am		**Opening of the Conference** T. Morris, NAFEMS CEO		
8:15 am – 8:25 am		**Welcome to NAFEMS 2020** R. Dreisbach, The Boeing Company and Chairman of NAFEMS NA Steering Committee		
8:30 am – 9:15 am		**Keynote Speaker:** Pathway to Future CAE Technologies and Their Role in Ambient Intelligent Environments **A. Noor,** Old Dominion University **(Ballroom B and C)**		
9:20 am – 10:05 am		**Keynote Speaker:** Isogeometric Analysis: Progress and Challenges **T. Hughes,** University of Texas at Austin **(Ballroom B and C)**		
10:05 am – 10:30 am		Break		
10:30 am - 11:00 am		**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	**The NCMS High Performance Simulation for Product Design Program** R. Jarman, NCMS
11:05 am - 11:35 am		**Dynamics of Social Systems - Analysis and Design** T. Doherty, Tommy Concepts	**The Case for Simulation Lifecycle Management** P. Lalor, SIMULIA	**How Modern Software Methodologies and High Performance Computing will Change the Face of Simulation** E. Dodd, IBM and J. Lyon, Simudyne

11:40 am - 12:10 pm		**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	
12:10 pm – 1:40 pm		Lunch Break		
1:40 pm – 2:10 pm		**Uncertainty Quantification for the Orion Crew Exploration Vehicle Heat Shield using Cielo and Dakota** J. Schiermeier, NASA Jet Propulsion Laboratory	**Simulation and the Creative Process – A New Paradigm** U. Schramm, Altair Engineering	**Modeling of Materials – Getting to a Smaller Scale** R. Yancey, Altair Engineering
2:15 pm – 2:45 pm		**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.
2:50 pm – 3:20 pm		**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
3:20 pm – 3:45 pm		Break		
3:45 pm – 4:15 pm		**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
4:20 pm – 4:50 pm		**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** S. Scampoli, ANSYS
6:00 pm – 8:00 pm		Networking Reception **(Ballroom A)**		

Thursday, October 30, 2008

7:00 am – 4:00 pm		Registration		
7:30 am – 8:30 am	Exhibits Open	Light Breakfast		
8:30 am – 9:15 am		**Keynote Speaker:** Integrated Computational Materials Engineering **M. Boyce,** M.I.T. **(Ballroom B and C)**		
9:20 am – 10:05 am		**Keynote Speaker:** Hybrid Engineering Enablers: Technology, Process and People Perspective **T. Abe,** Ford Motor Company **(Ballroom B and C)**		
10:05 am – 10:30 am		Break		
10:30 am - 11:00 am		**Product Performance Simulation in 2020** M. Halpern, Gartner	**Unified FEA** K. Short, SIMULIA	**Fatigue and Fracture Analysis - "On the Fly"** E. Punch, Punch Software Solutions
11:05 am - 11:35 am		**The Next Revolution in Simulation** J. Leuridan, LMS	**Advances in Element Technology: Solid-Shell Elements** W. Xie, ANSYS	**T-Splines and Isogeometric Analysis: A New Design-Through-Analysis Paradigm** M. Scott, University of Texas at Austin
11:40 am - 12:10 pm		**US Navy Validation of Computational Tools to Meet Future Requirements** J. Grimsley, US Naval SWC	**"Get it Right the First Time" with Simulation-Based Design** T. Weninger, ESI Group	**Modeling Bolted Connections for Stress Analysis** M. Tomlin, Siemens PLM Software
12:10 pm – 1:30 pm		Lunch Break		
1:30 pm – 2:00 pm		**The Role of Digital Simulation in Developing a PLASVEE© for 2020** R. Dreisbach, L. Krueger, J. Vandeventer, The Boeing Company **(Ballrooms B and C)**		**Simulation Training Challenges in the 2020 Workplace** N. Veikos, CAE Associates, Inc.
2:05 pm – 2:35 pm				**Case Study: How to Make an Analysis Interface that Both the Novice and the Expert will Use** T. Cunningham, Micro Motion, Inc. and D. Hensley, ATA Engineering, Inc.
2:40 pm – 3:10 pm				**New Frontiers in CAE Interoperability** A. Chinn, ITI TranscenData
3:10 pm – 3:35 pm		Break		
3:35 pm – 4:05 pm		**The Role of Digital Simulation in Developing a PLASVEE© for 2020** R. Dreisbach, L. Krueger, J. Vandeventer, The Boeing Company **(Ballrooms B and C)**		**Issues Facing Engineering Simulation: A CAE Providers Perspective** D. Conover, ANSYS
4:10 pm – 4:40 pm				**Virtual Prototyping - An Analyst's Dream: Progress Challenges and Future Path to 2020** S. Choudhry, MSC.Software
5:00 pm – 8:30 pm		Tour of the Center for Advanced Engineering Environments (CAEE) **(off-site)**		

Friday, October 31, 2008

7:00 am – 4:00 pm	Registration	
7:30 am – 8:30 am	Exhibits Open	Light Breakfast
8:30 am – 9:15 am		**Keynote Speaker:** MCAE Opportunities and Markets: A Fresh Look at a Shifting Landscape **J. Orr,** Cyon Research **(Ballrooms B and C)**
9:15 am – 9:30 am		Break (shortened)
9:30 am - 10:00 am		**The Future Directions of Simulation: One Career Person's Vendor-oriented View** D. Nagy, CD-adapco and Member of the NAFEMS NA Steering Committee
10:05 am - 11:35 am		**Vendor Forum** • **MSC.Software** o TBA • **SIMULIA** o Dr. Ken Short, VP of Strategy and Marketing • **ANSYS** o Mr. Dave Conover, Chief Technologist and Corporate Fellow • **SIEMENS** o Mr. Ken Blakely, VP of CAE Business Development • **ProSTEP, Inc** . o Dr. Andreas Schreiber, President and CEO • **CD-adapco** o Dr. Dennis Nagy, VP Marketing and Business Development • **LMS** o Mr. Tom Curry, Executive Vice-President, CMO • **Altair Engineering** o Mr. Brett Chouinard, VP - Americas • **Comet Solutions** o Mr. Malcolm Panthaki, Founder, Chairman & CTO • **ESI Group** o TBA • **FunctionSIM** o Mr. Karl Bangert, President • **IBM** o TBA For more information, visit: www.nafems.org/nafems2020/forum
11:35 am - 12:00 pm		**Break**
12:00 pm - 12:45 pm		**Keynote Speaker:** Computational Structural Acoustics: Technology, Trends and Challenges **J. Cipolla, Weidlinger Associates, Inc. (Ballrooms B and C)**
12:50 pm - 1:00 pm		**NAFEMS Wrap-up and Closure**

End of Conference