Tuesday, May 25

Start Time	Ballroom A	Room 552
7:00 AM	**Registration**	
8:00 AM	**Opening Remarks: David Barnes, General Manager, SIMULIA**	
8:10 AM	**SIMULIA Business Outlook: Scott Berkey, Chief Executive Officer, SIMULIA**	
8:25 AM	**SIMULIA Strategy: Ken Short, Vice President, Strategy & Marketing, SIMULIA**	
8:45 AM	**Invited Lecture:** *Developing Safe Packaging for Milk with Computer-Aided Engineering,* **Mattias Olsson, Manager, Virtual Engineering, Tetra Pak**	
	1A: AUTOMOTIVE *Chair: Dale Berry*	**1B: CIVIL ENGINEERING** *Chair: Xiaohu Liu*
9:40 AM	*Modeling and Analysis Techniques for Suspension Rubber Bushings,* **Satoshi Ito, Toyota Motor Corp.**	*Minneapolis I-35W Bridge Collapse – Engineering Evaluations and Finite Element Analyses,* **Carl Schultheisz, National Transportation Safety Board**
10:10 AM	*The Effects of Overload on Fatigue Life,* **Yeonsang Yoo, Hyundai Motor Company**	*Sensitivity Analyses of Structural Steel Connection Fire Performance,* **Kevin LaMalva, Simpson Gumpertz & Heger (SGH)**
10:35 AM	**BREAK & PARTNER EXHIBITION**	
11:05 AM	**Special Interest Groups**	
11:55 AM	**LUNCH & PARTNER EXHIBITION**	
	CS1A: COMPLEMENTARY SOLUTIONS *Chair: Karl D'Souza*	**CS1B: COMPLEMENTARY SOLUTIONS** *Chair: Christopher Wohlever*
12:55 PM	*Using STAR-CCM+ and Abaqus Direct Coupling to Perform FSI and Thermal Stress Simulations,* **Alan Mueller, CD-adapco**	*HyperSizer and Abaqus FEA Commercial Software Integration for Aerospace Structural Analysis and Composite Material Optimization,* **Craig Collier, Collier Research - Hypersizer**
1:25 PM	*Three Years of Direct Coupled FSI Results with AcuSolve and Abaqus,* **Steve Cosgrove, Acusim Software Inc.**	*Fracture, Fatigue, and Fire Damage Prediction Toolkit in Abaqus via Module Integration and Coupling,* **Jay Shi, Global Engineering and Materials, Inc.**
	2A: AUTOMOTIVE *Chair: Brad Heers*	**2B: MATERIALS** *Chair: Sekar Govindarajan*
1:55 PM	*A Challenging Problem: The Dynamic Analysis of a High-Precision Reduction Gear,* **Kazuhiko Yokoji, Nabtesco Corp.**	*Finite Element Modeling of Thermoplastics at Different Temperatures,* **Jorgen Bergstrom, Veryst Engineering**
2:25 PM	*Recent Applications of Abaqus/Explicit in GM Chassis CAE,* **Robert Geisler, General Motors**	*Creating Viable FEA Material Representations for Elastomers Using Non-Ideal Test Data,* **Ted Diehl, DuPont Engineering Technology**
2:55 PM	**BREAK & PARTNER EXHIBITION**	
	3A: AUTOMOTIVE *Chair: Marc Schrank*	**3B: CIVIL ENGINEERING** *Chair: Xiaohu Liu*
3:20 PM	*Predictive Crashworthiness Simulation in a Virtual Design Process without Hardware Testing,* **Jürgen Lescheticky, BMW Group**	*Finite Element Models for Dynamic Analysis of Vehicles and Bridges under Traffic Loads,* **Javier Oliva, Technical University of Madrid**
3:50 PM	*FE Analysis and Experimental Verification for Sealing Performance and Fatigue Durability of MLS Head Gasket of an Engine* **Sangwoo Cha, Hyundai Motors Company**	*The Engineering Practice of Elasto-Plastic Dynamic Time-History Analysis on Complex Building Structures Using Abaqus,* **An Dongya, Shanghai Xian Dai Architectural Design (Group) Co.,Ltd**
4:20 PM	*Stress Analysis Method for Bolt Thread Roots of Automotive Engine under Operating Condition*, **Hideto Momii, ESTECH Corp.**	
4:55 PM	**GENERAL LECTURE 1:** *Simulation Lifecycle Management with Real-World Customer Workflow,* **Satya Musti, General Manager, SLM, SIMULIA** and **Frank Popielas, Manager, Advanced Engineering, Sealing Products Group, Dana Holding Corp.**	
6:10 PM	**PARTNER RECEPTION**	

Ballroom C

1C: ENERGY
Chair: Mahesh Kailasam

Analysis of Casing Connections Subjected to Thermal Cycle Loading,
Gang Tao, C-FER Technologies

Structural Simulation of a Horizontal Pressure Vessel for Predicting Stress under Extreme Weather Conditions,
N. Johana Gámez, COMIMSA

CS1C: COMPLEMENTARY SOLUTIONS
Chair: Juan Hurtado

Nonlinear Multi-Scale Modeling of Reinforced Plastics Parts with Digimat to Abaqus,
Roger Assaker, e-Xstream engineering SA

Z-mat, Z-sim and Z-post: A Set of Tools for the Efficient Material Simulation and Durability Analysis,
Nikolay Osipov, Northwest Numerics & Modeling, Inc.

2C: ENERGY
Chair: Deepak Datye

Cyclic Loading of a Rock Mass for Underground Gas Storage Applications,
Ken Watson, Weatherford International

Evaluation of Stress and Strain Induced by the Rock Compaction on a Hydrocarbon Well Completion Using Contact Interfaces with Abaqus,
Gaia Capasso, eni E&P

3C: ENERGY
Chair: Asif Khan

An Evaluation of Associative Interface for SolidWorks and Abaqus/CAE,
Hung-Peng Li, Baker Hughes Incorporated

Tee Design Application,
Jean-Pascal Assemat, Digital Product Simulation

Shape Memory Material Manufacturing Design Optimization and Stress Analysis
Chuanyu Feng, Baker Hughes Incorporated

Room 551

1D: CONSUMER GOODS
Chair: David Cadge

Evaluating Hearing Protection Comfort through Computer Modeling,
Andrew Baker, Kimberly-Clark Corp.

Origami with Abaqus,
Alberto Mameli, Tetra Pak Packaging Solutions

CS1D: COMPLEMENTARY SOLUTIONS
Chair: Amit Agarwal

Fracture Mechanics and 3D Crack Mesh Analysis Software,
Greg Thorwald, Quest Integrity Group

Industry Examples of fe-safe Fatigue Analysis for Abaqus Models,
Farhad Esmaili, Safe Technology Limited

2D: LIFE SCIENCES
Chair: Zhen-zhong Du

Fracture Analysis of the Battery Cans for Implantable Pulse Generators,
Markus Reiterer, Medtronic, Inc.

Linear Elastic Fracture Mechanics (LEFM) Analysis of Flaws within Residual Stress Fields,
Brian Bailergeon, Cordis Corp.

3D: LIFE SCIENCES
Chair: Subham Sett

Virtual Design from Nature: Kinematic Modeling of the Seahorse Tail,
Benedict Verhegghe, Ghent University

FEA of a Proximal Humerus Fracture with a Fixation Plate,
Phillippe Young, University of Exeter

FEA of Prosthetic Lens Insertion during Cataract Surgery,
Robert Stupplebeen, Bausch + Lomb

Room 553

1E: DESIGN OPTIMIZATION
Chair: Frédéric Merceron

Simulation Driven Design Enabling Robust Design,
Alexander Karl, Rolls-Royce

Optimization of Composite Layers Lay-Up of an Aeronautical Component Using an Isight-Based Intelligent Decision Advisor, iDA,
Luca Fattore, Exemplar s.r.l.

2E: DESIGN OPTIMIZATION
Chair: Alex van der Velden

Isight-Abaqus Optimization of a Ring-Stiffened Cylinder,
Nicholas Barner, General Dynamics Electric Boat

Benefits of Simulation Process Automation for Automotive Applications,
Hugues Massé, INERGY Automotive Systems Research

3E: DESIGN OPTIMIZATION
Chair: Mike Sheh

Advanced Body in White Architecture Optimization,
Barry Bai (on behalf of Pan Asia Techincal Automotive Center), SIMULIA

Automating Architecture Alternative Trades,
Marshal Blessing, Raytheon