

Thursday, May 27

## Ballroom A

## Room 552

Start Time			
8:00 AM	Opening Remarks: Frans Peeters, General Manager, SIMULIA Europe		
8:15 AM	GENERAL LECTURE 4: <i>Current and Future Trends of High-Performance Computing with Abaqus</i> , Matt Dunbar, Chief Architect, SIMULIA		
	<b>7A: FORMING</b>	Chair: Sudeep Lahiri	<b>7B: DEFENSE</b> Chair: Jon Arata
9:05 AM	<i>Adaptive 3D Remeshing for Metal Forming Simulations</i> , Matt Gean, nanoPrecision Products		<i>Failure Analysis of a 105mm Fin Deployment Mechanism</i> , Robert Terhune, U.S. Army - ARDEC
9:35 AM	<i>Adaptive Remeshing Method via Inversion of Element Anisotropy in Large Deformation Finite Element Analysis</i> , Arbtip Dheeravong, King Mongkut's University of Technology Thonburi		<i>Determination of Critical Flaw Size in Gun Launched 40mm Grenade</i> , Nicholas Payne, U.S. Army - ARDEC
10:05 AM	<i>Using Energy History Data to Obtain Load vs. Deflection Curves from Quasi-Static Abaqus/Explicit Analyses</i> , Brian Bailargeon, Cordis Corp.		<i>XFEM Modeling of Mixed-Mode Cracks in Thin Aluminum Panels</i> , Jennifer Cordes, U.S. Army - ARDEC
10:30 AM	BREAK		
	<b>8A: AUTOMOTIVE</b>	Chair: Brad Heers	<b>8B: DEFENSE</b> Chair: Brad Maker
10:50 AM	<i>FEM Analysis of a Gearbox Housing for the Calculation of Stress and Deflection Characteristics</i> , Nikolas Drivakos, BETA CAE Systems SA		<i>Validation of Abaqus/Explicit CEL for Classes of Problems of Interest to the U.S. Army</i> , Pasquale Carlucci, U.S. Army - ARDEC
11:20 AM	<i>Fatigue Modeling of a Powder Metallurgy Main Bearing Cap</i> , Youssef Hammi, Mississippi State University		<i>Novel Approach to Conducting Blast Load Analyses Using Abaqus/Explicit CEL</i> , Chris Mougeotte, U.S. Army - ARDEC
11:50 AM	GENERAL LECTURE 5: <i>New Technologies and Industry Applications of Co-Simulation and Multiphysics</i> , Bruce Engelmann, Vice President and Chief Technology Officer, SIMULIA, David Fox, Director of Mechanics Technology, SIMULIA, and Mark A. Christon, Director of CFD Technology, SIMULIA		
12:45 PM	Closing Remarks: Scott Berkey, CEO, SIMULIA		
12:50 PM	Open Forum and Lunch		
1:30 PM	CONFERENCE CONCLUDES		

**Ballroom C**

**Room 551**

**7C: MANUFACTURING**

*Chair:*  
*Satish Gandhi*

*Application of Abaqus for Practical Postbuckling Analyses of Cylindrical Shells under Axial Compression,*  
**Takaya Kobayashi, Mechanical Design & Analysis Corp.**

*Simulation-Driven Design of Restrained Pipe Joints,*  
**Guido Quesada, Universidad de Costa Rica**

*3D Finite Element Simulation of the Milling Process of a Ti 6AL 4V Alloy,*  
**Oscar Zapata, Universidad Autónoma de Nuevo León**

**7D: MATERIALS**

*Chair:*  
*Harry Harkness*

*Modeling the Cyclic Response of HY-80 Steel Under Dynamic Loading,*  
**Alper Ucak, The Catholic University of America**

*Performance Evaluation of Finite Elements for Analysis of Advanced Hybrid Laminates,*  
**Ravi Kumar, Infosys Technologies Limited**

*Arbitrary Normal and Tangential Loading Sequences for Circular Hertzian Contact,*  
**Philip Garland, Dalhousie University**

**8C: CIVIL ENGINEERING**

*Chair:*  
*Michael Snyman*

*Combined Method of Dynamic Analysis of the Soil-Structure Systems at the Aircraft Crash onto Civil Structure of NPP,*  
**Vladimir Korotkov, JSC Atomenergoproekt**

*Modeling of Soils as Multiphase-Materials with Abaqus,*  
**Björn Schümann, Hamburg University of Technology**