Day 1: Tuesday, September 30th, 2008

9.00 - 9.15
Altair's Company Vision
James Scapa, Altair

9.15 - 9.45
CAE of Nissan - Digitization of the New Car Development Process and the Prospects to the Future
Kazuhiro Iijima, Nissan

9.45 - 10.15
CAE Driven Design in the Aerospace Industry
Dr. Gerd Schuhmacher, EADS Military

10.15 - 10.45
Break

10.45 - 11.10
CAE Integration in Renault Design
Jean Marc Crépel, Renault

11.10 - 11.40
Delivering Innovation and Intelligence in Product Design
Dave Peberdy, Unilever

11.40 - 12.10
Development of an intelligent alternative electric car
Daniel Moulène, SMERA

12.30 - 12.35
Session 1: Session
Rajiv Rampalli, Multibody Dynamics with Altair

12.30 - 12.50
Techniques in the Design and Development of a Suspension System
Romuald Fallet, Vehicle: Analysis of the Potential Damage on Passengers Using FEKO for Electromagnetic Applications

12.50 - 13.10
Finite Element Simulation of Impact Problems - Some Comparison Results Between FER/Impact and RADIOSS
Nicolas Davout, Sogeti

13.10 - 13.30
Finite Element Simulation of Humeral Intramedullary Nailing: Case of Torsion Loading
Lionel Thollon, Yves Godio, Inrets-LBA

13.30 - 13.50
Concept design of a composite aircraft door through integrated Finite Element Analysis, Multi-Body Simulation and Structural Optimization in HyperWorks
Sylviane Pormenté, ISAMS

13.50 - 14.10
Optimization of Tailored Blank ManufacturingDevelopment Process for Structural Adhesives in Full-Car Crash Models
Salim BOUABDALLAH, Esilv, M. ZARROUG, PSA

14.10 - 14.30
Multibody Dynamics Simulations for Structural Adhesives in Full-Car Crash Models
Peter Heyes, nCode

14.30 - 14.50
Fatigue Life Prediction Based on Modal Analysis for Vehicle Crashworthiness Simulations
Christian Galindo, Faurecia

14.50 - 15.10
Robust Driver Model for Vehicle Dynamics Simulations
Dr. Heiko Baum, Vedat Akdag, Gipser, Esslingen University

15.10 - 15.30
Development of a Multibody Model for the Virtual Testing of Exterior Parts
Mathias Roemer, Philippe Gilotte, Philippe, Plastics Omnium Auto Exterior

15.30 - 15.50
Mathematical Behaviour with Radioss
Christian Galindo, Faurecia

15.50 - 16.10
Simulation Tool Including Failure Detection for Structural Adhesives in Full-Car Crash Models
Michael Hamacher, FKA

16.10 - 16.30
Simulation Tool Including Failure Detection for Structural Adhesives in Full-Car Crash Models
Fabrice Arnaud, mechan, CTI: Next Generation Tire Interfacing

16.30 - 16.50
Optimization of Tailored Blank Manufacturing Development Process for Structural Adhesives in Full-Car Crash Models
Andrea Crucianelli, Ferretti

16.50 - 17.10
Optimization of Tailored Blank Concepts for Vehicle Design
Michael Hausladen, Metafora

17.10 - 17.30
Optimization of Tailored Blank Concepts for Vehicle Design
Dr. Heiko Baum, Vedat Akdag, Gipser, Esslingen University

17.30 - 17.50
Multibody Dynamics Simulations for Structural Adhesives in Full-Car Crash Models
Peter Heyes, nCode

17.50 - 18.10
Robust Driver Model for Vehicle Dynamics Simulations
Dr. Heiko Baum, Vedat Akdag, Gipser, Esslingen University

18.10 - 18.30
Simulation Tool Including Failure Detection for Structural Adhesives in Full-Car Crash Models
Michael Hamacher, FKA

18.30 - 18.50
Optimization of Tailored Blank Manufacturing Development Process for Structural Adhesives in Full-Car Crash Models
Andrea Crucianelli, Ferretti

**Day 2 Wednesday, Oct. 1st, 2008**

#### Keynotes

**9.00-9.30**
- **Altair's Product Direction**
  - Henrik Wenzel, Scania
  - A Modelling Tool that Fully Exploits Product Modularization
  - Udo Jankowski, Tecosim

**10.00-10.30**
- **Break**

**10.30-11.00**
- Stefan Eberhard, HyperMath: Practical Use Cases
  - Airbus A380 Cruciform Joint Optimization
  - Multi-Domain Approach to Parallel Optimization of Aluminium Material Use Computations in Structure Dynamics Using RADIOSS
  - Maciek Wronski, Altair
  - "Usage of HyperWorks within Innovation Works - particularly composite optimization"

**11.00 - 11.20**
- Simulating Ice Impact on Helicopter Flaps
  - Rainer Jouaux, EDJ
  - Splashdown Simulations of a Re-Entry Vehicle - Preliminary Analysis
  - Xavier Dugros, DPS
  - "Usage of HyperWorks within Landing Impact and Water Splashdown Simulations of a Re-Entry Vehicle - Preliminary Analysis"

**11.20 - 11.40**
- Bicycle Frame Optimization by Means of an Advanced Gradient Method Algorithm
  - Arcangelo Schena, Sintef
  - Dr. Robert Schilling, Bicycle Frame Optimization by Means of an Advanced Gradient Method Algorithm
  - Dr. Robert Schilling, Bicycle Frame Optimization by Means of an Advanced Gradient Method Algorithm

**11.40 - 12.00**
- Dr. Michael Herrmann, University of Göttingen
  - Development Process to Optimize the Manufacturing Process of a Custom-Specified Engine Block
  - Improvement of Automotive New Bus Optimization Structure to Improve the Roll-Over Test (ECE R66) Using Structural Foam (TEROCORE) with High Strength Steel
  - Rainer Jouaux, EDJ
  - Imposing Human Model - Example of Applications

**12.00 - 12.20**
- Prof. Marcelo A. Netto, University of Coimbra
  - Development of a Survey of RADIOSS Features and Performances for Stamping Simulation
  - A Survey of RADIOSS Features and Performances for Stamping Simulation
  - A Survey of RADIOSS Features and Performances for Stamping Simulation

**12.40-14.00**
- Lunch

**14.00-14.20**
- Olivier Tissier, PSA
  - Geometrical and Mechanical Modelling for Crashworthiness
  - Improvement of Simulation Methods in the Early Days of Vehicle Development
  - Motor Production for Acoustic Analyses
  - "A Business Intelligence Tool Applied in the Development Process to Significantly Accept Acceptance Tests"

**14.20-14.40**
- Dr. Michael Hoffmann, Closing Remarks

**14.40-15.00**
- Pierre Anquet, PSA
  - Benchmark of a Pseudo-Inverse Approach in A Business Intelligence Tool Applied in the Manufacturing Simulation of a Rear Impact
  - Introduction of a System-Specific IP System Development for Global Vehicle Platforms
  - Eurocopter, Yannick Chauveau, EMA
  - "Usage of HyperWorks within Innovation Works - particularly composite optimization"

**15.00-15.20**
- Dr. Michael Herrmann, Closing Remarks