

# Nordic LS-DYNA Conference, 18-19 October Gothenburg, Sweden

## Svenska mässan, Gothia Towers

Thursday, 18 October

08.30 - 09.00	Registration
<b>Key Note Session - Room H1</b>	<b>Chair: Marcus Redhe</b>
09.00 - 09.10	<b>Opening</b> Marcus Redhe, DYNAmore Nordic
09.10 - 10.10	<b>LS-DYNA, Development Status</b> Nielen Stander, LSTC
10.10 - 10.40	<b>Coffee Break</b>
10.40 - 10.50	<b>Sponsor: HPC for Computer Aided Engineering</b> F Geller, Gcompute
10.50 - 11.25	<b>Safety CAE for real world occupant protection in cars</b> Per Anders Eggertsen, Johan Jergeus, Volvo Cars
11.25 - 12.00	<b>Virtual Vehicle Development at NIO</b> Niclas Brännberg, NIO
12.00 - 13.35	<b>Lunch Break</b>

Thursday, 18 October

Session 1a Room H1	Chair: Mikael Schill
13.35 - 14.00	Free-fall simulation in Medical Device Development Gert Petersen, Medicom
14.00 - 14.25	Impact Simulations of Fiber Reinforced Plastics with LS-Dyna and Digimat Mikael Palm, Husqvarna
14.25 - 14.50	Process simulation of steel products with local CFRP reinforcements Daniel Berglund, Swerea SICOMP
14.50 - 15.25	Coffee Break

Session 2a Room H1	Chair: David Aspenberg
15.25 - 15.50	Performance Evaluation of the Harmonized 50th & 5th CAE dummies Jianfeng Yao, Volvo Cars
15.50 - 16.15	Automotive Crash Simulation Robustness using Principal Component Analysis Domenico Macri, Volvo Cars
16.15 - 16.40	A user defined constitutive model for prediction of localization and crack initiation calibrated by full field measurement Stefan Golling, GESTAMP
16.40 - 17.05	Sheet Metal Forming Simulation with Elastic Stamping Dies Viktor Sjöblom, Markus Lind, Johan Pilthammar Volvo Cars Olofström

Session 1b Room J2	Chair: Torbjörn Johansen
13.35 - 14.00	Automotive seat trim assembly simulations using J-SEAT and LS-DYNA Chella Ganesan Thangam, Volvo Cars
14.00 - 14.25	FSI assessment of offshore structures Martin Eriksson, Validus Engineering
14.25 - 14.50	Predicting influence of pre-crash pretensioning of the belt on human motion in emergency avoidance maneuvers Leila Jaber, Autoliv
14.50 - 15.25	Coffee Break

Session 2b Room J2	Chair: Thomas Borrvall
15.25 - 15.50	Thermo-mechanical material characterization and stretch-bend forming of AA6016 Peter Ottoson, Swerea IVF
15.50 - 16.15	Thermo forming simulation in LS-Dyna Fredrik Erling, Thule Ali Bazzi, Andreas Angelou, JU
16.15 - 16.40	Coupling process2structural analysis with ENVYO Christian Liebold, DYNAmore GmbH
16.40 - 17.05	The Role of LS-DYNA in the Design of the New London Electric Taxi J. Talbot (ARUP)

Session 1c Room R4	Chair: Christian Liebold
13.35 - 14.00	Multiphysics simulation of a tumbling mill using combined ICFD-DEM-FEM model Pär Jonsén, Luleå University
14.00 - 14.25	Numerical modelling of long rod fragmentation Teresa Fras, French-German Research Institute
14.25 - 14.50	Using LS-Dyna on the Lunarc HPC desktop with a distributed computing back-end Anders Sjöström, Lund University
14.50 - 15.25	Coffee Break

Session 2c Room R4	Chair: Anirban Badsudhar
15.25 - 15.50	Model Set up, Analysis and Results of the Inverse Forming Tool in ANSA Peter Appelgren, BETA
15.50 - 16.15	Ricochet off complex targets Marina Seidl, French-German Research Institute
16.15 - 16.40	A Study on Initial Conditions in Smooth-Particle-Hydrodynamics Modelling of High-Velocity-Impact Marvin Becker, French-German Research Institute
16.40 - 17.05	

17.15	Dinner / Mingle, Gothia Towers
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Friday, 19 October

Session 3a Room H1	Chair: Jimmy Forsberg
08:30 - 08.55	Calibration and application of *MAT_258: A new regularized failure model for shells Jens Holmen, NTNU
08.55 - 09.20	Theoretical aspects of *MAT_258: A through thickness regularization model for shell David Morin, NTNU
09.20 - 09.45	Bio mechanical studies carried out to define comfort for IKEA mattress Praveen Kulkarni, IKEA
09.45 - 10.10	Simulating Car theft with airbag model Jonatan Deleskog, Volvo Cars
10.10 - 10.35	Applications and Future Scope of Statistical Classifiers in LS-OPT Anirban Badsudhar, LSTC
10.35 - 11.00	Coffee Break

Session 3b Room J2	Chair: Daniel Hilding
08:30 - 08.55	Welding structure simulation - extended beyond the borders of academic testcases Jens Robrecht, Dynaweld
08.55 - 09.20	Experimental validation of a co-simulation method for hydraulic percussion units Håkan Andersson, Epiroc
09.20 - 09.45	Implementation and Calibration of the LS-DYNA PID Controller for Female Cervical Muscles Putu Alit Putra, Chalmers
09.45 - 10.10	Full-Field Material Calibration using LS-OPT Nielen Stander, LSTC
10.10 - 10.35	Modeling of Short Fiber Reinforced Plastics (SFRP) for pedestrian safety analysis Mats Landervik, DYNAmore Nordic
10.35 - 11.00	Coffee Break

Key Note Session - Room H1	
11.00 - 11.30	<b>Nonlinear Implicit in the Making - the Advanced made Simple</b> Thomas Borrvall, DYNAmore
11.30 - 11.40	Closing the conference Daniel Hilding, DYNAmore Nordic