

## Preliminary Agenda



Tuesday, June 9

16:30 - 18:30 **Pre-Registration** | Hotel Lobby

20:00 - 22:00 **Welcome Reception** | Roof Pool Bar

Wednesday, June 10 – Morning Sessions			
8:30 - 9:00	<b>Registration</b>   Foyer		
	<b>Session 1</b>   Maistros A chair: Prof. A. Michailidis, Aristotle University of Thessaloniki		
9:00 - 9:10	<b>Welcome</b> Chryssa Sferidou BETA CAE Systems SA, Greece		
9:10 - 9:20	<b>Opening speech</b> Dimitris Angelis, President BETA CAE Systems SA, Greece		
9:20 - 9:50	<b>Keynote Speech: How can CAE support Innovation?</b> Dr. Vasilios Bakolas Schaeffler Technologies AG & Co. KG.		
9:50 - 10:30	<b>Latest developments in BETA CAE Systems product line</b> Chryssa Sferidou BETA CAE Systems SA, Greece		
10:30 - 11:00	<b>Coffee Break &amp; Technical discussions</b>   Technology Gallery - Foyer		
	<b>Session 2A</b>   Maistros A chair: S. Seitanis, BETA CAE Nordic AB	<b>Session 2B</b>   Maistros B chair: S. Chatzimoisiadis, BETA CAE Systems SA	<b>Session 2C</b>   Zephyros chair: N. Drivakos, BETA CAE Systems SA
11:00 - 11:30	<b>A new approach on data management for the CAE model-building process at BMW: DCM-GUI</b> <sup>1</sup> Michael Tryfonidis*, <sup>2</sup> Hans-Peter Daunhert, <sup>2</sup> Marcel Meder <sup>1</sup> BETA CAE Systems SA, Greece, <sup>2</sup> BMW Group, Germany	<b>Parametrization of geometry with morphing boxes and integration in a multi-disciplinary optimization</b> Paul-Edouard Munch Dr. Ing. h.c. F. Porsche AG, Germany	<b>Performance-oriented partners in simulation - engine development as an example</b> Dr.-Ing. Michael Klein*, Dr.-Ing. Reinhard Helfrich INTES GmbH, Germany
11:30 - 12:00	<b>Complete solution for model build-up</b> Irene Makropoulou BETA CAE Systems SA, Greece	<b>Design optimization with ANSA morph</b> Tobias Eidevåg*, David Tarazona Ramos*, Mohammad El-Alti Alten AB, Sweden	<b>FEM analysis of a belt conveyor driving drum</b> A. Mihailidis, E. Bouras*, E. Athanasopoulos Aristotle University of Thessaloniki, Greece
12:00 - 12:30	<b>ANSA DM: simulation data management in pre- and post-processing</b> Dimitrios Katramados BETA CAE Systems SA, Greece	<b>Morphing strategies library presentation</b> Joshua Sims*, Sunil Earla, Ravi Nimbalkar, Yatin Kumbhar BETA CAE Systems USA Inc., USA	<b>Development of an automatic procedure for safety analysis of elevator frames following the EN-81 regulation</b> Dr. Ioannis Zyganitidis BLAU EI O.E., Greece
12:30 - 13:00	<b>Data process for CAE – structural analysis: from data hunting to drag &amp; drop</b> Uwe Krempels Daimler AG, Germany	<b>Optimization of morphing parameters using ANSA and VR&amp;D Genesis</b> Nick Kalargeros*, Dr Roger Darlington, Mark McNally Jaguar Land Rover Ltd, UK	<b>Design and topology optimization for additively manufactured structural parts: a formula student case study</b> H. Bikas, J. Stavridis, P. Stavropoulos*, G. Chryssoulouris** Laboratory for Manufacturing Systems and Automation, Department of Mechanical Engineering and Aeronautics, University of Patras, Greece   **Corresponding author
13:00 - 14:30	<b>Lunch</b>   The MET Hotel Restaurant		

Wednesday, June 10 – Evening Sessions			
	<b>Session 3A</b>   Maistros A chair: A. Perifanis, BETA CAE Systems SA	<b>Session 3B</b>   Maistros B chair: K. Haliskos, BETA CAE Systems SA	<b>Session 3C</b>   Zephyros chair: S. Kleidarias, BETA CAE Systems SA
14:30 - 15:00	<b>Analyzing scatter of crash simulation results using the DIFFCRASH plug-in within <math>\mu</math>ETA</b> <sup>1</sup> Dominik Borsotto*, <sup>2</sup> Antonios Perifanis, <sup>2</sup> Dimitrios Siskos <sup>1</sup> SIDACT GmbH, <sup>2</sup> BETA CAE Systems SA, Greece	<b>High-end solutions for CFD with ANSA/<math>\mu</math>ETA</b> Vangelis Skaperdas BETA CAE Systems SA, Greece	<b>Sheet metal forming optimization using ANSA and LS-DYNA</b> Simone Ferrero*, Caterina Tribuzi Nova Analysis, Italy
15:00 - 15:30	<b>Crash CAE in the all new Volvo XC90 and SPA platform</b> Domenico Macri*, Anders Sandahl, Johan Jergeus, Oscar Centeno, Anders Ericsson, Weijia Wu, Emil Claesson, Per Anders Eggertsen, Mathias Retzlaff, Michelle Khoo Volvo Car Corporation, Sweden	<b>The benefit of ANSA tools in the Dallara CFD process</b> Simona Invernizzi Dallara Engineering, Italy	<b>Automation Tool for sheet metal stamping using ANSA</b> Ramesh Venkatesan, Jithesh Erancheri, Nanda Kumar Kaizenat Technologies Private Limited, India
15:30 - 16:00	<b>Coffee Break &amp; Technical discussions</b>   Technology Gallery - Foyer		
	<b>Session 4A</b>   Maistros A chair: Y. Kolokythas, BETA CAE Systems SA	<b>Session 4B</b>   Maistros B chair: D. Souliotis, BETA CAE Systems SA	<b>Session 4C</b>   Zephyros chair: E. Giordano, BETA CAE Italy Srl
16:00 - 16:30	<b>New technologies for Occupant Safety model set-up and analysis</b> Athanasios Fokilidis*, Athanasios Lioras BETA CAE Systems SA, Greece	<b>FEMZip compression and faster <math>\mu</math>ETA visualization of CFD results</b> <sup>1</sup> Pinaki Banerjee*, Stefan Müller, <sup>2</sup> George Kalaitzidis, <sup>2</sup> Dimitrios Siskos <sup>1</sup> SIDACT GmbH, Germany, <sup>2</sup> BETA CAE Systems SA, Greece	<b>The effect of masticatory loading on the cervical loop region of the incisor in rodents</b> <sup>1</sup> T. Mitsiadis*, <sup>2</sup> A.Tsouknidas, <sup>3</sup> V. Karatsis, <sup>2</sup> N. Michailidis <sup>1</sup> Institute of Oral Biology, University of Zurich, Switzerland, <sup>2</sup> Dept. of Mechanical Engineering, Aristotle University of Thessaloniki, Greece, <sup>3</sup> BETA CAE Systems SA, Greece
16:30 - 17:00	<b>ANSA scripting for automated pedestrian marking and simulation input</b> <sup>1</sup> Yogesh Upreti <sup>1</sup> Matthias Erzgraeber <sup>2</sup> Thanassis Fokylidis <sup>1</sup> Adam Opel AG, Germany, <sup>2</sup> BETA CAE Systems SA, Greece	<b>Thermal simulations with THESEUS-FE and ANSA: Optimizing thermal comfort in an office building environment</b> Dr. Daniel Köster P+Z Engineering GmbH, Munich, Germany	<b>MFAT - A basic fatigue module for <math>\mu</math>ETA-post</b> <sup>1</sup> Anders Jonsson*, <sup>2</sup> Martin Sjöberg, <sup>2</sup> Johnny Grenwald <sup>1</sup> DynaMORE Nordic AB, Sweden, <sup>2</sup> BAE Systems, Sweden
17:00 - 17:30	<b>Pedestrian protection head impacts in glass correlation FEM test in the new SEAT Leon</b> Angel Segura Santillana*, Carlos Arregui-Dalmases, Javier Luzon-Narro SEAT Centro Técnico, Spain		
	<b>Session 5</b>   Technology Gallery - Foyer		
	Technical discussions, demonstrations and meetings		
20:00 - 21:00	Dinner   The MET Hotel Restaurant		

Thursday, June 11 – Morning Sessions

	<b>Session 6</b>   Maistros A chair: K. Kiouptsidis, BETA CAE Systems SA	
9:00 - 9:30	<b>Future developments in BETA CAE Systems product line</b> Christos Kolovos BETA CAE Systems SA, Greece	
9:30 - 10:00	<b>ETILYSIS: a new FEA solver</b> Stefanos Chatziangelidis BETA CAE Systems SA, Greece	
10:00 - 10:30	<b>SPDRM implementation in a European automotive OEM</b> <sup>1</sup> Irene Makropoulou*, <sup>2</sup> Niclas Dagson, <sup>1</sup> Menelaos Pappas <sup>1</sup> BETA CAE Systems SA, Greece, <sup>2</sup> ALTEN AB, Sweden	
10:30 - 11:00	<b>Coffee Break &amp; Technical discussions</b>   Technology Gallery - Foyer	
	<b>Session 7A</b>   Maistros A chair: V. Pavlidis, BETA CAE Systems SA	<b>Session 7B</b>   Maistros B chair: V. Skaperdas, BETA CAE Systems SA
11:00 - 11:30	<b>A new approach on processing large scale computer tomography data in conjunction with high-end CAE pre-processing</b> <sup>1</sup> Daniel Heiserer*, <sup>2</sup> Michael Tryfonidis <sup>1</sup> BMW Group, Germany <sup>2</sup> BETA CAE Systems, Greece	<b>The influence of mesh characteristics on OpenFOAM simulations of the DrivAer model</b> Grigoris Fotiadis*, Vangelis Skaperdas, Aristotelis Iordanidis BETA CAE Systems SA, Greece
11:30 - 12:00	<b>Design improvement through enhanced processes available within NVH Console</b> Tassos Sarridis*, Vasileios Pavlidis BETA CAE Systems, Greece	<b>Automated optimization of a CAE external aerodynamics for aero-drag reduction</b> <sup>1</sup> Andrea Serra*, <sup>1</sup> Massimiliana Carello, <sup>2</sup> Marco di Nonno <sup>1</sup> Politecnico di Torino, Italy, <sup>2</sup> BETA CAE Italy Srl, Italy
12:00 - 12:30	<b>Increased accuracy in squeak &amp; rattle simulations by enhanced material properties, damping values and aligned evaluation directions</b> <sup>1</sup> Mehrdad Moridnejad, <sup>1,2</sup> Casper Wickman, <sup>1</sup> Jens Weber, <sup>2</sup> Lars Lindqvist, <sup>2</sup> Rikard Söderberg <sup>1</sup> Volvo Car Corporation, Sweden <sup>2</sup> Chalmers University of Technology, Sweden	<b>Numerical simulations of flow through S-Duct</b> <sup>1</sup> Pravin Peddiraju, <sup>1</sup> Arthur Papadopoulos, <sup>2</sup> Vangelis Skaperdas, <sup>3</sup> Linda Hedges <sup>1</sup> BETA CAE Systems USA, Inc., USA, <sup>2</sup> BETA CAE Systems SA, Greece, <sup>3</sup> CFD Consultant, USA
12:30 - 13:00	<b>Global damping validation and a new modal contribution feature for squeak &amp; rattle simulation</b> Samy Bazine, Jens Weber* Volvo Car Corporation, Sweden	<b>Customization of μETA post for display of results from a molding simulation</b> <sup>1</sup> Prasanna Kondapalli*, <sup>1</sup> James McGuire, <sup>1</sup> Damiano LaRosa, <sup>2</sup> Deepak Lokesh, <sup>2</sup> Joshua Sims <sup>1</sup> BASF Corp., U.S.A, <sup>2</sup> BETA CAE Systems USA Inc., USA
13:00 - 13:10	<b>Group Photo</b>	
13:10 - 14:30	<b>Lunch</b>   The MET Hotel Restaurant	

Thursday, June 11 – Evening Sessions			
	<b>Session 8A</b>   Maistros A chair: M. Tryfonidis, BETA CAE Systems SA	<b>Session 8B</b>   Maistros B chair: A. Iordanidis, BETA CAE Systems SA	<b>Session 8C</b>   Zephyros chair: D. Katramados, BETA CAE Systems SA
14:30 - 15:00	<b>Pleasure vessel vibration and noise finite element analysis</b> <sup>1</sup> Sergio Macchiavello*, <sup>2</sup> Angelo Tonelli <sup>1</sup> D'Appolonia S.p.A., Italy, <sup>2</sup> Rina Services S.p.A., Italy	<b>Importance of accuracy in CFD simulations</b> Vedat Akdag Metacomp Technologies, USA	<b>Laminated composite products: simulation process made easy</b> Ioannis Nerantzis BETA CAE Systems SA, Greece
15:00 - 15:30	<b>Improving efficiency of ACMS and AMLS domain composition methods for large vibratory systems using re-analysis concepts</b> <sup>1</sup> Zissimos Mourelatos, <sup>2</sup> Santosh Patil, <sup>2</sup> John Skarakis <sup>1</sup> Oakland University, Rochester MI, USA, <sup>2</sup> BETA CAE Systems USA Inc., USA	<b>CFD analysis of supersonic and hypersonic wings using ANSA and μETA tools</b> Kaleeswaran Balasubramaniam*, Shivakumar Biradar Xitadel CAE Technologies, India	<b>Analysis of pressed composite automotive tailgate using ANSA &amp; μETA</b> Andy Ngai, Mark Arnold PENSO, UK
15:30 - 16:00	<b>Coffee Break &amp; Technical discussions</b>   Technology Gallery - Foyer		
	<b>Session 9A</b>   Maistros A chair: N. Trakatelis, BETA CAE Systems SA	<b>Session 9B</b>   Maistros B chair: E. Chatzivasiloglou, BETA CAE Systems SA	<b>Session 9C</b>   Zephyros chair: S. Chatziangelidis, BETA CAE Systems SA
16:00 - 16:30	<b>3D shape recognition using ANSA scripts</b> Koji Otani Integral Technology Co., Ltd., Japan	<b>FSI analysis &amp; optimization of a scaled racing car</b> Ch. Kokkinos*, K. Loukas, S. Kokkinos, A. Kovanis, M. Anastasopoulos, F. Kopsaftopoulos FEAC Engineering P.C., Greece	<b>Simulation of carbon-roving-structures-extreme light and strong by filament wound reinforcement</b> <sup>1</sup> Dirk Dreißig*, <sup>2</sup> Peter Faßbänder, <sup>1</sup> Ulrich Hindenlang <sup>1</sup> LASSO Ingenieurgesellschaft mbH, Germany, <sup>2</sup> FS Software & Konstruktionen GmbH, Germany
16:30 - 17:00	<b>Automatic generation of multibody simulations in ANSA by usage of graph-based design languages</b> Constantin Diez Adam Opel AG, Germany	<b>Multiobjective duct optimization with open source CFD solver</b> <sup>1</sup> Daniele Obiso, <sup>2</sup> Stamatina Petropoulou <sup>1</sup> Phitec IngegneriaSrl, Italy, <sup>2</sup> ICON Technology & Process Consulting Ltd, United Kingdom	<b>Execution and evaluation of the optimization process for a multi-material damping treatment</b> <sup>1</sup> M. Jaber*, <sup>1</sup> A. Baum, <sup>1</sup> H. Schneeweiss, <sup>2</sup> J. Bös, <sup>2</sup> T. Melz <sup>1</sup> BMW Group, Germany, <sup>2</sup> Technische Universität Darmstadt, Germany
17:00 - 17:30	<b>Design and study of door components for a two-seater electric vehicle in side impact conditions</b> P. Bazios*, P. Spanoudakis, N. Tsourveloudis School of Production Engineering and Management, Technical University of Crete, Greece	<b>On vortex shedding from trailing edge of a full-scale marine propeller blade</b> Saeed Javdani*, Nicholas Mitroglou, John S. Carlton City University London, School of Engineering and Mathematical Sciences, UK	<b>Size and shape optimization of overmolded continuous glass fiber laminate with short glass fiber reinforced polyamide for maximum impact resistance using ANSA, LS-OPT, and LS-DYNA coupled with ULTRASIM®</b> Praphulla Chandra*, Rodrigo Orozco BASF Performance Materials, USA
17:30 - 18:30	<b>Session 10</b>   Technology Gallery - Foyer  <b>Technical discussions, demonstrations and meetings</b>		
20:00 -	<b>Dinner - Social Event: "Greek Night"</b>   "Warehouse C", Port of Thessaloniki		



Friday, June 12

**Session 11** | Maistros A  
chair: I. Makropoulou, BETA CAE Systems SA

9:00 - 9:30 **Keynote Speech: Introduction of active safety technology into new car assessment programmes**  
Prof. Sadayuki Ujihashi  
Chair of JNCAP, Professor Emeritus at Tokyo Institute of Technology

9:30 - 10:00 **The evolution of BETA CAE Systems suite scripting capabilities Into a full CAE development platform**  
Yianni Kolokythas\*, Michael Giannakidis  
BETA CAE Systems SA, Greece

10:00 - 10:30 **Process automation tools for accelerating CAE processes in ANSA environment**  
Umesh Mallikarjunaiah\*, Mrityunjaya Yeli, Prakash Krishnaswamy, Xitadel Group, India

10:30 - 11:00 **Coffee Break & Technical discussions** | Technology Gallery - Foyer

**Session 12A** | Maistros A  
chair: G. Korbetis, BETA CAE Systems SA

**Session 12B** | Maistros B  
chair: G. Fotiadis, BETA CAE Systems SA

11:00 - 11:30 **Multistage optimization of automotive control arm through topology and shape optimization**  
<sup>1</sup>Duane Detwiler, <sup>2</sup>Emily Nutwell\*, <sup>3</sup>Deepak Lokesha  
<sup>1</sup>Honda R&D Americas, USA,  
<sup>2</sup>Ohio State University SIMCenter, USA,  
<sup>3</sup>BETA CAE Systems USA Inc., USA

**CFD comparison for the SARM rotary engine with a conventional reciprocating Otto cycle engine**  
<sup>1</sup>V. Gkoutzamanis \*, <sup>2</sup>D. Mertzis, <sup>1</sup>S. Nikolaidis, <sup>1</sup>S. Savvakis  
<sup>1</sup>the SARM Project, Greece,  
<sup>2</sup>Lab. of Applied Thermodynamics, Dept of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

11:30 - 12:00 **Application of non-parametric sizing optimization for car body parts using Simulia Tosca structure and ANSA**  
<sup>1</sup>Georgi Chakmakov\*, <sup>2</sup>Serafim Chatzimoisiadis  
<sup>1</sup>Dassault Systèmes, Bulgaria  
<sup>2</sup>BETA CAE Systems, Greece

**Numerical simulation of multiphase flow through porous media - application to flow through porous shale reservoirs**  
M. Aboukhedr\*, Dr. K. Vogiatzaki, Prof. M. Gavaises, Dr. N. Mitroglou, City University London, UK

12:00 - 12:30 **Connecting rod optimization integrating modeFrontier with ANSA**  
<sup>1</sup>Alberto Clarich\*, <sup>1</sup>Marco Carriglio, <sup>2</sup>Giulio Bertulin, <sup>2</sup>Günther Pessl  
<sup>1</sup>ESTECO SpA, Italy, <sup>2</sup>BMW Motoren GmbH, Austria

**Prediction of resistive soot sensor behavior in diesel exhaust via 3D simulation of soot deposition**  
P. Fragkiadoulakis\*, D. Mertzis, S. Geivanidis, Z. Samaras  
Lab. of Applied Thermodynamics, Dept. of Mechanical Engineering, Aristotle University of Thessaloniki, Greece

12:30 - 13:00 **Morphing, optimization and automation strategies in ANSA - The efficient way to optimization**  
Onkar Mande\*, Ravi Nimbalkar  
BETA CAE Systems USA Inc., USA

**Mesh curving techniques and parallel simulations of high order discontinuous Galerkin schemes on unstructured meshes**  
<sup>1</sup>F. Hindenlang, <sup>2</sup>G. Gassner, <sup>3</sup>C.-D. Munz  
<sup>1</sup>Max-Planck Institute for Plasma Physics, Garching  
<sup>2</sup>Mathematical Institute, University of Cologne  
<sup>3</sup>Institute for Aero- and Gas dynamics, University of Stuttgart

**Session 13** | Maistros A  
chair: S. Satiel, BETA CAE Systems SA

13:00 - 13:30 **Closing Remarks**

13:30 - 15:00 **Lunch** | The MET Hotel Restaurant