fea INFORMATION
WWW.FEAINFORMATION.COM
AN ENGINEERING RESOURCE MAGAZINE
March 2009

ANSYS

"Making An Impact"

Modern explicit solutions enable the study of blast or high-impact scenarios.

CRAY

Cray XT5m(TM) System Expands Market

for Cray's Successful Petaflops Technology

Short Course

Non-Linear Finite Element Analysis

Thomas J. R. Hughes and Ted Belytschko

FEA Information Announcements:

We welcome as Participants

Cray Inc.

Dutton Simulation

LSTC New Course Offering

April 22-24 – CA ALE Advanced Applications (pdf file)

China Announcement:

ARUP, ETA China, NEC Announce a Combined Training Program

7th European Conference Program is Available

High Resolution 5MB
http://www.dynamore.de/conferences/eu7/agenda/EC_Invitation_A4_highres.pdf
Low Resolution 613KB
http://www.dynamore.de/conferences/eu7/agenda/EC_Invitation_A4.pdf

Sincerely,

Art Shapiro	Editor	art@feainformation.com
Marsha Victory	President	mv@feainformation.com
Trent Eggleston	Business Manager	feaanswer@aol.com
Wayne Mindle	Graphics	wlm@lstc.com
Anthony Giaccana	Participant/Sites Manager	agiac99@aol.com

Table of Contents

Cray XT5m(TM) System Expands Market for Cray's Successful Petaflops Technology

The next revolution in production massively parallel processing (MPP) computing.

The Cray XT5m leverages Cray's experience with petascale scalability in a new line of midrange supercomputers. The system combines powerful application performance with exceptional manageability, reliability, and lower cost of ownership in a midsized supercomputer

Product Brochure – pdf file 2.01MB

Cray XT5m –The Cray XT5m system builds on the success of the Cray XT5(TM) product, whose installations include the world's most powerful supercomputer for open science at Oak Ridge National Laboratory. The Cray XT5m supercomputer is a massively parallel processing (MPP) system that delivers performance, efficiency and manageability unrivaled in its price range with capabilities that previously were only available to the world's largest research facilities.

As with all Cray XT(TM) systems, the Cray XT5m series can be upgraded or expanded to take advantage of new technologies, such as next-generation compute processors, I/O technologies and interconnects as they become available. The new product is a seamless extension of the Cray XT5 product line and Cray XT5m customers can upgrade easily to a Cray XT5 supercomputer if needed.

The CrayXT5m system incorporates a version of the Cray SeaStar(TM) network specially designed and optimized for systems with peak performance of less than 100 teraflops. This provides Cray XT5m systems with superior bandwidth, upgradeability and manageability at price points similar to those of commodity clusters. Offered with up to six cabinets, the Cray XT5m series features Quad-Core AMD Opteron(TM) processors and a Cray SeaStar-based 2D torus interconnect. The Cray Linux Environment(TM) enables the use of a wide range of open source tools as well as streamlined porting of a broad set of applications from independent software vendors (ISVs).

To reduce energy use and control operating costs, the Cray XT5m system

employs innovative packaging technologies and an efficient power conversion train. Each system can be air- or liquid-cooled. In an air-cooled configuration, the design offers unparalleled processor density, using less air per watt than other air-cooled configurations. The optional Cray ECOphlex (TM) (PHase-change Liquid EXchange) technology can dramatically reduce the operating costs associated with cooling and provide flexibility in datacenter design and implementation.

The Cray XT5m system compute blades are designed for maximum power efficiency with only the necessary components needed for massively parallel processing: processors, memory and interconnect. The 400/480VAC power supplies in each cabinet connect directly from the power grid without transformer and power distribution unit loss, further contributing to reduced energy usage and lower cost of ownership.

Specifications: For full specifications please read the Cray XT5m Product brochure

Product Brochure – pdf file 2.01MB

.

- CPU: 64-bit AMD Opteron 2000 processors: up to 192 per cabinet
- Operating System: Components include SUSE Linux™, Cray Hardware Supervisory System (HSS) and Cray System Management Workstation (SMW) software
- Message Passing Libraries: MPI 2.0, Cray SHMEM
- Flops: 7 to 12 teraflots per cabinet

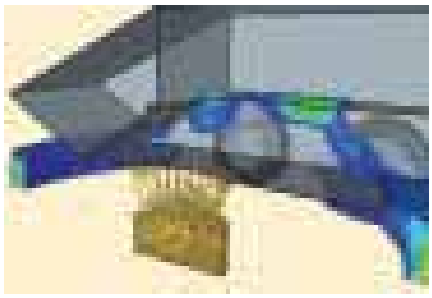
About Cray Inc. - As a global leader in supercomputing, Cray provides highly advanced supercomputers and world-class services and support to government, industry and academia. Cray technology enables scientists and engineers to achieve remarkable breakthroughs by accelerating performance, improving efficiency and extending the capabilities of their most demanding applications. Cray's Adaptive Supercomputing vision will result in innovative next-generation products that integrate diverse processing technologies into a unified architecture, allowing customers to surpass today's limitations and meeting the market's continued demand for realized performance. Go to www.cray.com for more information.

Making An Impact © Copyright ANSYS, Inc.

© Copyright ANSYS Inc. (excerpt)

The complete Article can be read at ANSYS:

Modern explicit solutions enable the study of blast or high-impact scenarios.



Simulation of landmine explosion

By Bence Gerber, Regional Manager, Explicit Products, and Tham C. Yang, Software Engineer, ANSYS, Inc.

Simulation can provide insight into the complex physicalphenomena that occur when severe loads are applied over a short period of time. High-speed impacts, penetrations, explosions, fluid structure interaction and other transient physical phenomena with high stress–strain rates are best solved with an explicit method using programs such as ANSYS LS-DYNA and ANSYS AUTODYN software.

Explicit solvers discretize physical models, often created from CAD geometry, by creating a mesh of elements. The conservation equations for mass momentum and energy are solved numerically using explicit time integration. Combining these equations with material models, initial conditions and boundary conditions that are often nonlinear in nature, engineers and analysts can produce accurate results that correctly model complex physical events.

Running simulations involves making trade-offs among accuracy, ease of problem setup and computing time. ANSYS AUTODYN technology, developed over the past two decades, has consistently focused on ease of use and user productivity.

ANSYS AUTODYN software offers multiple solution methods, such as Lagrange to model structural response, Euler to model

gas and fluid flows (including high pressure solid deformations in which metals behave as a liquid), and smooth particle hydrodynamics to model hypervelocity impacts and brittle material fracture and flow. These methods can be combined

for various regions of a single problem to reach an optimal solution. Additional capabilities that reduce the amount of effort and time to complete an analysis include:

- The ability to set up, run and visualize analyses interactively
- Mapping from one solution method to another
- Mapping in dimensions from 1-D to 2-D to 3-D
- The ability to generate problem-specific output,

such as a table of fragments produced

- An extensive material library that is easy to use

or modify.

The rapid increase in available computing power has enabled the technology of explicit simulation to be used for an expanding number of applications ranging from aerospace to mining, manufacturing to biomedical. The ANSYS

AUTODYN product is part of a comprehensive suite of software available through the ANSYS Workbench platform, which continues to grow to provide a complete simulation environment…

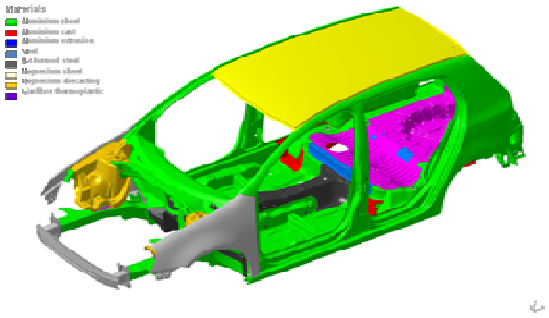
The complete Article can be read at ANSYS:

http://www.ansys.com/magazine/issues/7-12-2008-ansys-advantage/001-analysis_tools.pdf

Sign Up for ANSYS Advantage Magazine **ANSYS Advantage Magazine Sign up**

The European SuperLight Car project

Author: Daniel Hilding, Engineering Research Nordic AB



SLC Concept body – each part is to use the optimal material. Each color represents a different material type:

- **green - aluminium,**
- **yellow - magnesium,**
- **magenta - glassfiber reinforced plastics, etc.**

The Complete Publication can be located on line:

www.feapublications.com sidebar Featured or Link Now to publication - pdf

Summary

The SuperLight Car project is a joint European effort of 38 partners from the automotive industry and research institutions. The goal of the project is to develop technology for a new significantly lighter body for a mass-market car in the Golf-class. Reduced weight means reduced fuel consumption, so this is a step toward a more ecologically sustainable transport system.

The focus of this article is on simulation based design. The development of the SLC concept body relies heavily on simulation based design, as does all car development today. Engineering Research, a specialist consultant in the field, has supported the SLC project with know how in crash simulation as well as special simulation tools for the new materials and joining methods that are used in the SuperLight Car project.

Lower weight for the environment

Weight is one of the factors affecting the fuel consumption of cars, i.e. increased weight leads to increased fuel consumptions.

The car body of a modern Golf-size car is typically made of steel and has a weight of around 280 kg, see the figure at the top of the page. Thus, the body is one of the major parts of a car. In light of the above facts it is therefore not surprising that a number of research projects have been carried out with the goal to reduce the weight of the car body:

- ULSAB and ULSAB-AVS - WorldAutoSteel organization
- NewSteelBody – ThyssenKrupp Steel

- NextGenerationVehicle – stainless steel (www.ngvproject.org)

Despite the emergence of new light materials the mass market car of today is still based on a steel body.

The SuperLight Car (SLC) project

A key feature of the SuperLight Car project is the use of a multi-material strategy which aims at selecting the material and manufacturing process for each part of the car body that minimizes both weight and cost.

The result of the SLC project is a 30 % lighter car body concept for an affordable and recyclable mass market car of the Golf-type.

SLC organization

The SLC project is a research and development project headed by Volkswagen and partly financed by the European Commission under the 6th Framework Programme. It involves 38 partners from the European automotive industry and research institutions and has a €20m budget. For more information about the project visit www.superlightcar.com

NONLINEAR FINITE ELEMENT ANALYSIS Short Course

August 17-August 21, 2009 Austin TX

A short course taught by: Thomas J. R. Hughes and Ted Belytschko

Learn the methods and the basics of nonlinear finite elements from two international experts in the field and get up to date on the latest research in finite elements. Some of the topics are:

Nonlinear constitutive equations	Time integration
Element Technology	Multiscale analysis
Isogeometric methods	Finite elements in fluids
XFEM and level sets	Meshfree methods
Plates and shells	Fluid-structure interaction

A limited number of graduate student registrations at reduced tuitions are available.

The course starts with a review of the basics of nonlinear finite element analysis, constitutive equations, element design and selection, and solvers. It then progresses to state-of-the-art methods, including current topics such as the extended finite element method, isogeometric methods, multiscale methods and mesh free methods. Important concepts are clearly explained so that students can obtain a thorough grounding in and overview of nonlinear finite element analysis.

This Short Course is intended for engineers and scientists who are interested in obtaining an understanding of nonlinear finite element analysis, both as users of software and developers of software. A background in engineering or applied sciences and some previous exposure to the finite element method are necessary for understanding the material covered in this short course. The course has been attended by engineers and scientists from corporations, such as Dassault, Boeing, General Motors, Ford, Daimler Benz, BMW, Fiat, PSA, Renault, Philips, Fujitsu, IBM, EDF, Siemens; software companies; government laboratories, such as Livermore, Argonne, Sandia; government offices, such as NSF and the Defense Nuclear Agency; U.S. Navy, NASA, ESA, Air Force Laboratories, and universities. Many attendees have been graduate students, post-doctoral students and young faculty.

Course Objectives

The purpose of this short course is to provide engineers, scientists and researchers with an understanding of the fundamentals and a critical survey of the state-of-art of nonlinear finite element methods in solids, structures, and fluids. The theoretical background needed for an understanding and use of nonlinear software, the computer implementation of various techniques, and modeling strategies will be treated. Advantages and shortcomings of alternative methods and the practical implications of recent research developments will be stresses. Mathematical and algorithmic developments will be explained in terms comprehensible to engineers.

Short Bios of Lecturers

THOMAS J.R. HUGHES

Professor of Aerospace Engineering and Engineering

Computational and Applied Mathematics Chair III The University of Texas at Austin

Previously taught at the University of California, Berkeley, the California Institute of Technology and Stanford University. He is the author of over 300 works on numerical analysis and continuum mechanics, with emphasis on finite element methods. Author or editor of eighteen books, including The Finite Element Method: Linear Static and Dynamic Finite Element Analysis and Computational Inelasticity . He has received the Bernard Friedman Memorial Prize in Applied Mathematics from the University of California, Berkeley, the Walter L. Huber Research Prize from the ASCE, the Melville, Warner and Timoshenko Medals from ASME, the Computational Mechanics Award of the Japan Society of Mechanical Engineers, the von Neumann Medal of USACM, the Gauss-Newton Medal of IACM, the JSCES Grand Prize from the Japan Society of Computational Engineering and Science, and Honorary Doctorates from the Université Catholique de Louvain, and the Universities of Pavia and Padua. He has held the Cattedra Galileiana (Galileo Galilei Chair), Scuola Normale, Pisa, and Eshbach Professorship, Northwestern University. He is editor of the International Journal Computer Methods in Applied Mechanics and Engineering, past Chairman of the Applied Mechanics Division of ASME, past President of USACM and of IACM, and a member of the American Academy of Arts and Sciences, the Istituto Lombardo, the Academy of Medecine, Engineering and Science of Texas, and the National Academy of Engineering.

TED BELYTSCHKO

Walter P. Murphy Professor of Computational Mechanics, Northwestern University

He is the author of over 300 works on a wide variety of applied mechanics problems, with emphasis on explicit finite element methods. Editor of seven books, including: Computational Methods for Transient Analysis (with T.J.R. Hughes). He is author of the recent book Nonlinear Finite Elements for Continua and Structures. He is editor of the International Journal for Numerical Methods in Engineering. He has received the Timoshenko and Pi Tau Sigma Medals from ASME, the USACM von Neumann Medal and Computational Structural Mechanics Award, the Gauss-Newton Medal from IACM, the von Karman Medal, the Aerospace Structures and Materials Award and the Walter L. Huber Research Prize from ASCE, the Thomas Jaeger Prize from IASMIRT, the Computational Mechanics Award of the Japan Society of Mechanical Engineers, the IACM Computational Mechanics Award, the Baron Medal and Honorary Doctorates from the University of Liège, University of Lyon 1, and Ecole Centrale, Paris. He is past Chairman of the Engineering Mechanics Division of ASCE, the Applied Mechanics Division of ASME, and the U.S. National Committee on Theoretical and Applied Mechanics, past President of

USACM and the American Academy of Mechanics, and a member of the American Academy of Arts and Sciences and the National Academy of Engineering.

Registrants will receive three books as part of their registration fee:

T Belytschko, WK Liu and B Moran:

Nonlinear Finite Elements for Continua and Structures

J Simo and TJR Hughes:

Computational Inelasticity

TJR Hughes:

The Finite Element Method

Contact Information:

If you have any questions regarding this course, please send us an e-mail at

info@feshortcourse.com

If you have any questions regarding registration for this course, please send us an e-mail at :

registration@feshortcourse.com

For more details see

FE Short Course

Available for Purchase From Amazon.com

TJR Hughes

The Finite Element Method

T. Belytschko, WK Liu, B Moran

Nonlinear Finite Elements for Continua and Structures

J Simo and TJR Hughes:

Computational Inelasticity

DUTTON Simulation Forming Solutions

For Complete Information visit Dutton Simulation

Consulting in product feasibility and tool design

Blank development and forming simulation

Research & development projects

Dutton Simulation provides cost estimating, part design feasibility and press tool simulation solutions to the manufacturing industry.

Services benefit the design and manufacture of metal products, including part designers, process & tooling engineers and stamping suppliers. Industries served include automotive, aerospace, white goods, electronics and all forms of precision engineering.

Software Provided:

- The Forming Suite products from Forming Technologies Inc (FTI), Ontario, Canada
- DYNAFORM, from Engineering Technology Associates (ETA, Michigan, US
- The range of CAD translators from Datakit

Services

- Consulting in product feasibility and tool design
- Blank development and forming simulation
- Metal formability and assembly training courses
- Introductory and advanced software training
- Research & development projects
- LS-DYNA Software Consulting for Metal Forming

Industries Served:

- Automotive
- Aerospace
- White goods
- Electronics
- All forms precision engineering
- Many additional Industries

Trevor Dutton has been working in forming simulation since the early 1990s and has pioneered many of the techniques in use today; he has been involved in non-linear finite element analysis since the mid-1980s. Trevor Dutton is a Chartered Engineer (CEng MIMechE).

Contact:

Dutton Simulation Ltd Lindsey Cr.,

Kenilworth Warwickshire CV8 1FL

United Kingdom

If you would like to speak to someone straight away, or have an urgent software support issue, please call us on +44 (0)1926 732147 or send an email to enquiries@duttonsimulation.com

Dutton Simulation

TOPCRUNCH – LS-DYNA Benchmarks - INTEL

www.topcrunch.org

Computer/Interconnect: Intel Stoakley server/bus

Processor: Intel® Xeon® Quad Core X5482

March 11-16th

Vendor/Submitter	#Nodes x #Processors per Node x #Cores Per Processor = Total #CPU	Time (Sec)	Benchmark Problem
Intel/SSG/ASE	1 x 2 x 4 = **8**	1483	neon_refined_revised
Intel/SSG/ASE	1 x 2 x 4 = **8**	22778	3 Vehicle Collision
Intel/SSG/ASE	1 x 2 x 4 = **8**	198759	car2car
Intel/SSG	1 x 2 x 4 = **8**	1483	neon_refined_revised
Intel/SSG	1 x 2 x 4 = **8**	1483	neon_refined_revised
Intel/SSG	1 x 2 x 4 = **8**	22778	3 Vehicle Collision
Intel/SSG	1 x 2 x 4 = **8**	198759	car2car
Intel/SSG	1 x 2 x 4 = **8**	198759	car2car

EASi India – LSTC California

EASi India, is a distributor of LS-DYNA, ANSA, Lattice-3D, VCOLLAB and CarSim

Building on the success of the First LS-DYNA User Event in India hosted by EASi India, Ramesh Venkatesan – Head – Technology Support Group is visiting Livermore Software Technology located in California starting April 02, 2009.

The objective of his visit is to build upon their technology partnership with LSTC, and attend the Blast and Penetration course taught by Paul DuBois.

Ramesh will be spending extra time at LSTC working with their technical support team, and learning the latest features in LS-DYNA, LS-OPT and LS-PrePost.

A major part of his visit will be establishing a cooperative training program to bring experts from LSTC to India, to hold local training courses, and visits customer sites, for LS-DYNA specific simulation questions.

If you have any questions for Ramesh for sales, training in India or customer site visits by LSTC engineers, please contact him at:

Ramesh Venkatesan
rvenkate@easi.com
Head - Technology Support Group, EASi
91 80 661 470 51

China News

Anthony Giaccana

During the past years a steady movement within China has been toward the use of LS-DYNA®, LS-OPT®, and LS-PrePost®. Slowly and steadily it has gained momentum within the automotive industries, educational institutions, and engineering fields.

ARUP (Kimbal Virdi), ETA China (Martin Ma), and NEC (ChengWu) and LSTC, have joined forces to make 2009 the beginning of specific training programs, events and conferences.

FEA Information Inc. is pleased to announce the invitation to LS-DYNA Users (LS-DYNA 用户)

LS-DYNA Airbag Training Course（ LS-DYNA 气囊培训课程）

A free training course in airbag modeling in LS-DYNA is being presented by Dr. Isheng Yeh, from LSTC on the 22nd and 23rd April 2009.

邀请您参加免费的Isheng Yeh 博士的LS-DYNA 气囊模型培训课程，日期为2009 年4 月22 和23 日。

The course schedule is as follows 课程日程如下:

22nd April（ 4 月22 日）

- Introduction to airbag modelling 气囊模型简介
- Airbag folding 气囊折叠
- Reference geometry 参考几何
- Material models 材料模型
- Contacts 接触
- Uniform pressure method 均匀压力方法

23rd April (4 月23 日）

- ALE and Corpuscular Method (CPM, Particle methods)
  overview 概述ALE 和微粒子方法（CPM、粒子法）
- ALE
- CPM
- Q&A

The course, including presentation and w orkshop, w ill be held at Arup's Shanghai office

本课程包括报告和练习均在奥雅纳上海办公室进行:

Arup International Consultants (Shanghai) Co., Ltd.
奥雅纳工程咨询（上海）有限公司
39F Huai Hai International Plaza
淮海国际广场39 楼
1045 Huai Hai Road (M)
淮海中路1045 号
Shanghai
上海
200040
Lunch w ill be provided.（提供午餐）

Please confirm your attendance as soon as possible w ith your LS-DYNA distributor.

请尽快与LS-DYNA 代

Dr. Yeh will also be attending:

04/16~04/17 Isheng Yeh will be representing LSTC at the NEC conference, Beijing

and presenting "LS-DYNA's latest development and application"

04/18: " The 4th Advanced Training Course on the Automotive

Collision Simulation and Safety Design technologies", hosted by CMES/MIA

and CAA/MTC (CMES: China Mechanical Engineer Society

Dr. Yeh will give a seminar, about 4~6 hours, on

1 LS-DYNA solver overview and update

2. LS-DYNA models for safety application, including dummy, FHM and barrier

3. LS-DYNA for safety analysis

4. LS-OPT and LS-PrePost

5. Latest LS-DYNA application

LS-DYNA® and Related Courses LSTC & Worldwide 2009

Information on LSTC classes contact jane@lstc.com

Advanced - Impact Analysis	$950	MI June 23-26
Advanced Options	$750	MI June 11-12, CA Sept 07-08, MI Dec 10-11,
ALE/Eulerian & Fluid/Structure Interaction	$750	CA July 15-17,
ALE Advanced Applications	$400	CA April 22-24
Blast & Penetration	$1,250 minimum 15 students	CA Apr. 02-03 MI Oct. 22-23
Composite Materials	$750	CA June 23-24
Concrete and Geomaterial Modeling (min 3 students)	$1,000	CA Sept. 24-25
Contact	$750	CA March 19-20 CA June 25-26 MI Sept 10-11,
Element-free Galerkin	$400	MI July 21-22
Heat Transfer & Thermal-Stress Problems	$500	To be announced contact Art Shapiro for information shapiro@lstc.com
Implicit	$750	CA June 29-30 MI Sept 21-22
Introduction to LS-DYNA LS-PrePost is no fee and held the day prior to dates shown	$750	CA May 05-08 CA Aug 04-07 CA Nov 10-13 MI March 17-20 MI June 16-19 MI Sept 15-18 MI Dec 15-18
Introduction to LS-OPT	$750	MI April 14-17 CA Nov 3-6
Material Modeling Using User Defined Options	$750	CA July 01-02
MESH Free Methods (SPH and EFG)	$750	CA Dec 08-11

Please check with the listed Company for accuracy of dates/courses.

FEA Information participants are invited to post classes, for details contact Anthony agiac99@aol.com

Courses are in Alpha Order	**Country**	**Company**	**Date**
Introduction to LS-DYNA	Germany	DYNAmore	23-Apr
LS-DYNA SPH	France	AS+	1-Apr

Paul Du Bois LS-DYNA Courses			
Blast & Penetration	USA	LSTC	1-Apr
Blast & Penetration	France	ALYOTECH	8-Oct
Crash Analysis	Germany	DYNAmore	11-May
Crash Analysis	Germany	DYNAmore	1-Dec
Crash Analysis	Germany	CADFEM	5-May
Crash Analysis	Germany	CADFEM	24-Nov
Crash Analysis	SWEDEN	ERAB	26-May

Pre Post Processing Software

Livermore Software Technology Corporation

LS-PrePost is an advanced interactive program for preparing input data for LS-DYNA and processing the results from LS-DYNA analyses

Engineering Technology Associates, Inc

FEMB Engineering Technology Associates' Finite Element Model Builder (FEMB) is a finite element pre- and post-processor for use with all major analysis codes and CAD Software.

JSOL Corporation

JVISION is a general purpose pre-post processor for FEM software. Designed to prepare data for, as well as support, various types of analyses, and to facilitate the display of the subsequent results

Oasys, Ltd

Oasys Primer is a model editor for preparation of LS-DYNA input decks.

Oasys D3Plot is a 3D visualization package for post-processing LS-DYNA analyses using OpenGL® (SGI) graphics.

BETA CAE Systems S.A.

Provides complete CAE pre- and post-processing solutions. ANSA, the world wide standard pre-processor and full product modeler for LS-DYNA, with integrated Data Management and Task Automation. μETA, a thriving innovative software with special features for the high performance and effortless 3D & 2D post-processing of LS-DYNA results.

Simpleware

Provides software solutions for robust, fast, and easy conversion of 3D images into high quality meshes which can be used for FEA, CFD, CAD, RP.

Participant LS-DYNA® Resource Page (alpha order)

Fully QA'd by Livermore Software Technology Corporation

SMP and MPP Hardware and OS

FUJITSU

FUJITSU Prime Power	SUN OS 5.8

HP

HP PA-8X00	HP-UX 11.11. and above
HP IA-64	HP-UX 11.22 and above
HP Opteron	Linux
HP Alpha	True 64

INTEL

INTEL IA32	Linux, Windows
INTEL IA64	Linux
INTEL Xeon EMT64	Linux, Windows 64

NEC

NEX SX6	Super-UX

SGI

SGI Mips	IRIX 6.5X
SGI IA64	SuSE 10 w/Propack 4 Red Hat 3 or 4 w/ Propak 3

Participant LS-DYNA® Resource Page (alpha order)

Fully QA'd by Livermore Software Technology Corporation

MPP and Interconnect MPI

CRAY

	O/S	HPC Interconnect	MPI Software
CX1	Windows HPC Server 2008, Linux	InfiniB	MS MPI, HP MPI, Intel MPI
XT5	Linux	SeaStar2	Cary MPI
XT5M	Linux	SeaStar1	Cray MPI

FUJITSU

	O/S	HPC Interconnect	MPI Software
FUJITSU Prime Power	SUN OS 5.8		

HP

	O/S	HPC Interconnect	MPI Software
HP PA8000	HPUX		
HPIA64	HPUX		

INTEL

	O/S	HPC Interconnect	MPI Software
INTEL IA32	Linux, Windows	InfiniBand (Voltaire), MyriCom	MPICH, HP MPI, OpenMPI
INTEL IA64	Linux		MPICH, HP MPI, OpenMPI
INTEL Xeon EMT 64	Linux	InfiniBand(Topspin, Voltaire), MyriCom, PathScale InfiniPath	MPICH, HP MPI, INTEL MPI, OpenMPI

NEC

	O/S	HPC Interconnect	MPI Software
NEX SX6	Super-UX		

SGI

	O/S	HPC Interconnect	MPI Software
SGI Mips	IRIX 6.5 X	NUMAlink	MPT
SGI IA 64	Propack 3, 4 & 5	Numalink, InfiniBand(Voltaire)	MPT, Intel MPI, MPICH
SGI/Xeon64	Propack 3		MPT

LS-DYNA® Resource Page - Participant Software

The following list are software programs interfacing to, or have the LS-DYNA solver embedded within their product. For complete information on the software products visit the corporate website.

ANSYS/LS-DYNA

Built upon the successful ANSYS interface, ANSYS/LS-DYNA is an integrated pre and postprocessor for the worlds most respected explicit dynamics solver, LS-DYNA. The combination makes it possible to solve combined explicit/implicit simulations in a very efficient manner, as well as perform extensive coupled simulations in Robust Design by using mature structural, thermal, electromagnetic and CFD technologies.

AI*Environment:

A high end pre and post processor for LS-DYNA, AI*Environment is a powerful tool for advanced modeling of complex structures found in automotive, aerospace, electronic and medical fields. Solid, Shell, Beam, Fluid and Electromagnetic meshing and mesh editing tools are included under a single interface, making AI*Environement highly capable, yet easy to use for advanced modeling needs.

ETA – DYNAFORM

Includes a complete CAD interface capable of importing, modeling and analyzing, any die design. Available for PC, LINUX and UNIX, DYNAFORM couples affordable software with today's high-end, low-cost hardware for a complete and affordable metal forming solution.

ETA – VPG

Streamlined CAE software package provides an event-based simulation solution of nonlinear, dynamic problems. eta/VPG's single software package overcomes the limitations of existing CAE analysis methods. It is designed to analyze the behavior of mechanical and structural systems as simple as linkages, and as complex as full vehicles.

MSC.Software - MSC.Dytran LS-DYNA

Tightly-integrated solution that combines MSC.Dytran's advanced fluid-structure interaction capabilities with LS-DYNA's high-performance structural DMP within a common simulation environment. Innovative explicit nonlinear technology enables extreme, short-duration dynamic events to be simulated for a variety of industrial and commercial applications on UNIX, Linux, and Windows platforms.

MSC.Software - MSC.Nastran/SOL 700

The MSC.NastranTM Explicit Nonlinear product module (SOL 700) provides MSC.Nastran users the ability access the explicit nonlinear structural simulation capabilities of the MSC.Dytran LS-DYNA solver using the MSC.Nastran Bulk Data input format.

MSC.Nastran

Explicit Nonlinear will allow users to work within one common modeling environment using the same Bulk Data interface. NVH, linear, and nonlinear models can be used for explicit applications such as crash, crush, and drop test simulations. This reduces the time required to build additional models for another analysis programs, lowers risk due to information transfer or translation issues, and eliminates the need for additional software training.

MSC.Software – Gateway for LS-DYNA

Gateway for LS-DYNA provides you with the ability to access basic LS-DYNA simulation capabilities in a fully integrated

and generative way. Accessed via a specific Crash workbench on the GPS workspace, the application enhances CATIA V5 to allow finite element analysis models to be output to LS-DYNA and then results to be displayed back in CATIA.

Oasys software for LS-DYNA

Oasys software is custom-written for 100% compatibility with LS-DYNA. Oasys PRIMER offers model creation, editing and error removal, together with many specialist functions for rapid generation of error-free models. Oasys also offers post-processing software for in-depth analysis of results and automatic report generation.

ESI Group

Visual-CRASH For DYNA

Visual-Crash for DYNA helps engineers perform crash and safety simulations in the smoothest and fastest possible way by offering an intuitive windows-based graphical interface with customizable toolbars and complete session support. Being integrated in ESI Group's Open VTOS, an open collaborative multi-disciplinary engineering framework, Visual-Crash for DYNA allows users to focus and rely on high quality digital models from start to finish. Leveraging this state of the art environment, Visual Viewer, visualization and plotting solution, helps analyze LS-DYNA results within a single user interface.

APTEK

The MMCD is a graphics-based and menu-driven program that interfaces with the LS-DYNA library of material models and the LS-OPT optimization code. The core of the MMCD is the driver, which calculates the stress-strain behavior of material models driven by combinations of strain increments and stress boundary conditions, i.e. pure shear stress, and combinations of uniaxial, biaxial, and triaxial compression and tension. MMCD input and output is accessed via pre- and post-processors; graphical user interfaces (GUIs) for easily selecting the material model parameters and load histories, and for plotting the output in both two (stress-strain curves) and three (yield surfaces) dimensions. The pre-processor, driver, and post-processor are combined into a web downloadable software package that operates seamlessly as a single code.

.

BETA CAE Systems - ANSA

Is an advanced multidisciplinary CAE pre-processing tool that provides all the necessary functionality for full-model build up, from CAD data to ready-to-run solver input file, in a single integrated environment. ANSA is a full product modeler for LS-DYNA, with integrated Data Management and Process Automation. ANSA can also be directly coupled with LS-OPT of LSTC to provide an integrated solution in the field of optimization.

BETA CAE Systems - μETA

Is a multi-purpose post-processor meeting diverging needs from various CAE disciplines. It owes its success to its impressive performance, innovative features and capabilities of interaction between animations, plots, videos, reports and other objects. It offers extensive support and handling of LS-DYNA 2D and 3D results, including those compressed with SCAI's FEMZIP software

FEA Information Participants –

Company name takes you directly to Website

OASYS Ltd: Markets engineering software products. Consulting engineers, planners and project managers working in all areas of the built environment.

JSOL Corporation: Specializing in Research & Consulting; System Consulting, Frontier Business, System Integration and Science Consulting.

HP: Leading provider of high performance computing solutions for CAE, including workstations, servers, blades and storage..

ANSYS Inc.: Develops, markets, supports and delivers collaborative analysis optimization software tools.

SGI: Silicon Graphics, Inc., is a leader in high-performance computing, visualization, and storage.

MSC.Software: Information technology software and services provider.. Products & services used to enhance & automate the product design/manufacturing process.

NEC: A history of more than 100 years of leadership/innovation in the core high-technology sectors of communications, computers/electronic components

---

INTEL: For more than three decades, Intel Corporation has developed technology enabling the computer and Internet revolution that has changed the world.

Engineering Technology Associates, Inc.: Provides engineering & IT services & has created the streamlined simulation software packages DYNAFORM and VPG

ESI Group: A software editor for the numerical simulation of prototype and manufacturing process engineering in applied mechanics.

BETA CAE Systems S.A.: Specialized in the development of state of the art CAE pre- and post-processing software systems.

Participant page is continued on next page

FEA Information Participants –

Company name takes you directly to Website

APTEK: Among the software developed APTEK develops and licenses an interactive program for driving LS-DYNA material models - the Mixed Mode Constitutive Driver (MMCD).

PANASAS: High performing Parallel Storage for scalable Linux clusters. Delivering exceptional scaling in capacity and performance for High Performance Computing (HPC) organizations.

Intelligent Light: A a world leader in the development and delivery of software for computational fluid dynamics (CFD) users. We help the world's best engineering and research organizations maximize the productivity and impact of their CFD capabilities

---

Voltaire: Voltaire is a leading provider of scale-out computing fabrics for data centers, high performance computing and cloud environments. Voltaire's InfiniBand-based solutions help software applications run simulations and product-design analysis faster.

CRAY: A global leader in supercomputing, Cray provides innovative systems that enable scientists and engineers in government, industry and academia to meet both existing and future computational challenges. Building on expertise in designing, developing, marketing and servicing the world?s most advanced supercomputers, Cray offers a comprehensive portfolio of high performance computing (HPC) systems that deliver unrivaled sustained performance on a wide range of challenging applications.

LS-DYNA® Software Distributors

Alphabetical order by Country

Australia	**Leading Engineering Analysis Providers**
Canada	**Metal Forming Analysis Corporation**
China	**Arup**
China	**ETA China**
France	**Alyotech**
France	**AS+**
Germany	**CAD-FEM**
Germany	**DYNAmore**
India	**Oasys, Ltd.**
India	**Cranes Softwaree Ltd.**
India	**EASi Engineering**
India	**CADFEM Engineering Services India**
Italy	**DYANmore**
Italy	**ENGINSOFT**
Japan	**JSOL Corporation**
Japan	**ITOCHU Techno-Solutions Corporation**
Japan	**Fujitsu**
Korea	**Theme Engineering**
Korea	**Kostech**
Netherlands	**Infinite Simulation Systems BV**
Russia	**State Unitary Enterprise - STRELA**
Sweden	**Engineering Research AB**
Taiwan	**Flotrend Corporation**
USA	**Engineering Technology Associates, Inc.**
USA	**Dynamax**
USA	**Livermore Software Technology Corp.**
UK	**ARUP**

Consulting and Engineering Services

Australia	**Leading Engineering Analysis Providers (LEAP)** **Greg Horner info@leapaust.com.au** **02 8966 7888**
Canada	**Metal Forming Analysis Corp. - (613) 547-5395** **Chris Galbraith galb@mfac.com**
Canada	**ROI Engineering Inc.** **(416)249-1471**
France	**Alyotech 33 (0)1 30 67 23 44** **Nima Edjtemai nima.edjtemai@alyotech.fr**
France	**AS+ 33 (0)5 61 44 54 98** **Vincent Lapoujade v.lapoujade@asplus.fr**
Netherlands	**Infinite Simulation Systems BV** **Jurgen Mathijssen j.mathijssen@infinite.nl**
UK	**ARUP - 44 (0) 121 213 3317** **Brian Walker brian.walker@arup.com**
UK	**GRM +44 (0) 1926 889300** **info@grm-consulting.co.uk**
UK	**Dutton Simulation +44 (0)1926 732147** **enquiries@duttonsimulation.com**
USA	**KBEC L.C - (512) 363-2739** **Khanh Bui kdbui@sbcglobal.net**
USA	**SE&CS - (707) 837-0559** **Len Schwer len@schwer.net**
USA	**Engineering Technology Associates, Inc:** **(248) 729-3010**
USA	**Predictive Engineering - (1-800) 345-4671** **George Laird george.laird@predictiveengineering.com**
USA	**Friedman Research Corporation** **(805) 683-1300**
USA	**Structure Technology** **(920).722.7060**
USA	**CAE Associates, Inc** **(203) 758-2914**

Educational & Contributing Participants

Alphabetical Order By Country

China	Dr. Qing Zhou	Tsinghua University
India	Dr. Anindya Deb	Indian Institute of Science
Italy	Professor Gennaro Monacelli	Prode – Elasis & Univ. of Napoli, Frederico II
Russia	Dr. Alexey I. Borovkov	St. Petersburg State Tech. University
USA	Dr. Ted Belytschko	Northwestern University
USA	Dr. David Benson	University of California – San Diego
USA	Dr. Bhavin V. Mehta	Ohio University
USA	Dr. Taylan Altan	The Ohio State U – ERC/NSM
USA	Dr. Ala Tabiei	University of Cincinnati
USA	Prof. John D. Reid	University of Nebraska
USA	Professor Thomas Vasko	Connecticut State University

Informational Websites

The LSTC LS-DYNA Support site: www.dynasupport.com

LS-DYNA Support Site	FEA Informationwebsites
LS-DYNA Examples (more than 100 Examples)	LS-DYNA Conference Site
TopCrunch – Benchmarks	LS-DYNA Publications to Download On Line
LS-DYNA Publications	LSTC LS-PrePost Tutorials
CADFEM GmbH Portal	LS-OPT Support Site
LS-DYNA Distributors	LS-DYNA Consulting
D3 VIEW - Tracking Developments in LS-DYNA®	

ANSYS Conference & 27th CADFEM Users Meeting

November 18 - 20, 2009

Leipzig, Germany

Register now and receive the early-birds discount!

Whether you apply as a lecturer or participant – your early registration by June 30th, 2009 will help us plan the event – and we consider this worthy of a 10 % early-birds discount.

You are not risking anything as you can cancel, free-of-charge, until October 30, 2009 and replacement participants can be appointed at any time.

For Complete Details Visit

www.usersmeeting.com

"3rd ANSA & µETA International Conference"

This is an excerpt: For full conference information visit:

http://www.beta-cae.gr/3rd_conference_announcement.htm

Being consistent to our biannual appointment and celebrating the 10 years since the establishment of **BETA CAE Systems S.A.**, it is our pleasure to invite you to participate in the **"3rd ANSA & µETA International Conference"** to be held on September 9-11, 2009, in Porto Carras Grand Resort Hotel, Halkidiki, Greece.

The principal aims of this event are to bring the CAE Community together with **BETA CAE Systems S.A.** and to promote an international exchange of the latest concepts, knowledge and development requirements on our flagship software products, **ANSA** & **µETA**. Technical papers will be presented outlining the latest advances in CAE strategy, methodology, techniques and applications related to our products.
Participants will have the chance to be informed about the latest software trends, demonstrate their concepts and achievements and present new development requirements.
….
…The conference will be of interest to decision makers, strategy & methodology planners, simulation experts, applications users and researchers at the forefront of the CAE simulation for various disciplines, coming from OEMs and suppliers from a wide spectrum of industrial sectors, specially from, but not limited to, the:

- automotive,
- motorsports,
- railway,
- aerospace,
- shipbuilding/offshore,
- electronics,
- energy,
- heavy machinery,
- medical/biomechanics,
- chemical processes and
- academic
- power tools,

A wide range of topics on various simulation application fields and disciplines will be covered, including:

- CAE strategy & process planning,
- Process automation,
- Product & Simulation Data Management (PDM / SDM),
- Durability,
- Crash & Rollover,
- Occupant & Pedestrian Safety,
- Dynamics,
- Noise, Vibration & Harshness,
- Computational Fluid Dynamics (CFD),
- Optimization,
- Composite materials modeling,
- Climate control,
- Engine technology,
- Heat transfer,
- Simulation results assessment, etc

Papers are invited on the outlined topics and others falling within the scope of the event.

……..

UPDATE Speakers will receive free accommodation for the duration of the event, courtesy of BETA CAE Systems S.A. Further information and instructions will be provided to those who respond to this call.

In order to keep a low overall budget for the participants, there is no participation fee.

Nevertheless, your registration is essential for the organization of the event.

Registration includes coffee breaks, dinner on September 8th, and meals on September 9th, 10th and 11th, 2009.

Return the registration form by fax or email no later than June 30, 2009, to:

BETA CAE Systems S.A.

fax: +30-2392-021828

email: congress@beta-cae.gr
Mrs. Photini Paraskevopoulou

BETA CAE Systems S.A.
tel: +30-2392-021914
fax: +30-2392-021828
email: congress@beta-cae.gr

Abstracts submission:
Final manuscripts submission:
June 20, 2009

Registration until: **June 30, 2009**

Event: **September 9 - 11, 2009**

7th European LS-DYNA® Conference

14th - 15th May 2009, Salzburg, Austria

The following are the keynote Presentations:

Aircraft Industry

Blade Retention and Bird Impact

M. Nucci (Snecma, F)

Automotive Industry

Multi-Disciplinary Optimization – Crash, NVH ...

Dr. T. Zeguer (Jaguar Cars Limited, UK)

Material Modeling for Crash

P. Du Bois (Consultant, D)

Impact Applications

High Speed Impact - Test and Simulation

Prof. S. Hiermaier (Fraunhofer Institut EMI, D)**Metal Forming**

Trends and Developments

Dr. W. Volk (BMW AG, D)

Deep Drawing Processes

Prof. J. Danckert (University Aalborg, DK)

Dr. N. Stander (LSTC, USA)

Railway Industry

Crashworthiness of Trains

Dr. M. Seitzberger (Siemens AG, A)

Research

Modeling of Wood

Prof. J. Eberhardsteiner (TU Wien, A)

Validation & Verification

Model Calibration with Experiments

Prof. M. Langseth (NTNU Trondheim, NO)

Development of LS-DYNA

General Developments

Dr. J. Hallquist (LSTC, USA)

Material Models

Dr. B. Feng (LSTC, USA)

Development of LS-OPT

Dr. N. Stander (LSTC, USA)

7th European LS-DYNA® Conference

http://www.dynamore.de/conferences/eu7

AGENDA:

Agenda high resolution (pdf) - now available 5MG

Agenda low resolution (pdf) - now available 613 KB

First Morning Conference Agenda - Thursday, 14th May 2009

08:00 am	Registration
	WELCOME/ KEYNOTE PRESENTATIONS
8:30 am	Welcome U. Franz (DYNAmore)
8:40 am	Recent Developments in LS-DYNA – I J.O. Hallquist (LSTC)
9:10 am	Wood & Wood Products – Linking Multiscale Analysis & Structural Numerical Simulations K. Hofstetter, Prof. J. Eberhardsteiner, R. Stürzenbecher (University Vienna)
9:40 am	Today's Challenges in Crash Simulation J. Kohler, T. Frank, M. Feucht (Daimler)
10:10 am	Coffee break
10:40 am	Virtual Engineering and Planning Process in Sheet Metal Forming W. Volk, P. Charvet (BMW)
11:10 am	Crash Simulation of Trains M. Seitzberger (Siemens)
11:40 am	From 6 Month to 6 Weeks with Multi-Disciplinary Optimization (MDO) T. Zeguer (Jaguar Cars)
12:10	Lunch

2nd International Conference on Hot Sheet Metal Forming Of High-Performance Steel -

June 15-17, Luleå, Sweden

The 2nd International Conference on Hot Sheet Metal Forming of High-Performance Steel will be held in Luleå, Sweden, from June 15 to 17, 2009. It is organised by the Swedish-German Centre of Excellence for Hot Sheet Metal Forming of High-Performance Steel, CHS^2. For further information: www.chs2.eu. See also www.ltu.se/tfm/chs2 and www.metform.de. Any questions can be addressed to Lena Olsson, lena.m.olsson@ltu.se.

The purpose of the conference is to bring technical and scientific experts from different countries together, in order to encourage the exchange of knowledge and to establish a forum for discussion of the state-of-the-art and new research results in the field of hot sheet metal forming of high-performance steel. The conference will cover the topics *Material*, *Process Design*, *Modelling & Simulation* and *Products*.

The second international conference on the topic of hot sheet metal forming of high performance steel will be held in Luleå, Sweden, where the technology of press hardening was invented and industrialized. The demand for hot sheet metal forming technology has steadily increased and, pulled by strong international driving forces such as environment and safety, we are now experiencing and unprecedented growth in automotive applications. The research concerning hot forming processes, micro-structure evolution, deformation, failure, thermal properties and issues such as coatings, heat transfer, high temperature tribology, is intense and a strong research community is under development. This second international conference takes off from where the first in Kassel, Germany (2008) was closed. The scientific and industrial community will be further strengthened and new results and developments from the growing international research programs will be displayed. As the second in a series of international conferences, in the future to be held alternatively every second year in Kassel and Luleå, CHS^2 2009 will highlight multiple aspects from a scientific as well as an industrial viewpoint.

The City of Luleå welcomes all participants to a town surrounded by water, clear skies and around-the-clock light summer nights. The airport is close to the city with hourly connections to Stockholm and the rest of the world. During spare time, visit attractions like Gammelstad Church Town, placed on the UNESCO world heritage list, or take a tour on a boat and experience the Luleå archipelago.

We are looking forward to welcoming you as an author or as a conference participant.

Best regards from The Swedish-German Centre of Excellence for Hot Sheet Metal Forming of High-Performance Steel, CHS^2, Kassel/Luleå

American Society For Engineering Education

Invitation by Scott Williamson s.williamson@asee.org

But act fast! 82% of the exhibit hall floor has been sold. If you're interested in participating, I strongly encourage you to confirm your space ASAP!

Why exhibit at ASEE2009? Location. Location. Location. The ASEE annual conference and exposition provides you with an outstanding opportunity to display your products and services to the largest gathering of engineering educators in the country. ASEE member faculty, department heads and deans are procurement and curriculum decision makers and represent over 40 engineering disciplines. ASEE has reserved more than 19,000 square feet of exhibit space in Austin, a highly visible platform to communicate your brand value proposition to over 3,600 engineering educators and administrators.

Founded in 1893, the American Society for Engineering Education (ASEE) has, for over a century, provided cutting edge leadership and innovative programs and services as the largest and most prestigious membership society for the U.S. engineering education community. Over 90% of all U.S. engineering colleges are ASEE members. The ASEE Annual Conference & Exposition provides a three day forum for over 3,500 leaders in the field, including professors, deans, instructors, and students, to present their research, exchange ideas, and interact with their colleagues and industry counterparts. Join companies like Autodesk, DuPont, National Instruments, MathWorks and Lockheed

Exhibiting at the ASEE annual conference provides you with cost-effective, value-added opportunities to:

- **PROMOTE YOUR BRAND – Create brand awareness and build** brand loyalty among a targeted audience of engineering educators and administrators, including over 200 Deans.
- **DRIVE SALES REVENUE** – Gather new leads, build relationships with prospects and cultivate current customers at the largest multi-disciplinary gathering of engineering educators in the U.S.
- **AUGMENT YOUR RECRUITING EFFORTS** – Cultivating relationships with ASEE member deans and faculty is a great way to build a competitive advantage when you're recruiting their best and brightest students.
- **DISPLAY CORPORATE LEADERSHIP** - - Highlight your commitment to promoting innovation and excellence in engineering and technology,

Please visit http://www.asee.org/conferences/annual/2009/Exposition.cfm

Any questions, please let me know. I look forward to hearing with you!

Scott Williamson - Sales & Marketing Manager
s.williamson@asee.org

American Society for Engineering Education

1818 N St. NW, Suite 600, Washington, DC 20036

ph: 202-331-3549

ICCT09 1st International Conference on Concrete

Tabriz, IRAN

The 1st International conference on concrete technologies serve the interchange of knowledge and experience in the field of concrete technologies among different research groups connected with this material and coming from all over the world.

The conference is organized by The Iranian National Retrofiting Center, Tabriz, Iran and will be organized in close contact with the Chair of Structural Design at Dresden Univesity of Technology.

Sponsorship for the conference is Peshahvar Technical University Pakistan.

The conference venue is the Petroshimi Cultural Complex, located in Tabriz, Iran.

Among the many conference topics are:

- High Performance Concrete
- Concrete in Fire
- Sustainability and Durability
- Concrete Construction in Architecture
- Analytical Models and Computer Simulation
- Ductile Fibre Reinforced Cementitious Composites
- Rehabilitation and Retrofitting of Concrete Structures
- Assessment, Monitoring and Environmental Aspect
- Concrete Materials and Chemical Admixtures
- Standard And Specifications

Excerpt from Conference Format…

- The official language of the conference is English and all papers must be submitted in English. However, the presentations are possible to be in the Persian language.
- The special topics will be grouped in parallel sessions to attract specialists and interested persons in neighboring fields.
- There will be invited and welcome papers from all countries. The conference also will attract local attendees to participate and present papers and give an insight into the current level of the concrete in Iran.

Call for Papers:
February 01, 2009
Abstract Submission Deadline:
May 15, 2009
First Announcement for Abstracts:
May 20, 2009
Full paper Submission Deadline:
Aug. 15, 2009
Final Announcement for full papers: Sept. 20, 2009
Registration deadline:
Sept 20, 2009

Office Contact Locations:
Asia: Tabriz Iran
asia@icct.ir
Europe: Dresden, Germany
Europe@icct.ir

World Wide Conferences & Events

04/03-04 USA	**American Society for Engineering Education ASEE Spring 2009 Northeast Conference**
04/21-22 USA	**MSC.Software 2009 Virtual Product Development Conference**
05/12-13 Germany	**MSC.Software 2009 Virtual Product Development Conference**
05/14-15 Austria	**7th European LS-DYNA Conference**
05/24-27 Korea	**Computational Technologies in the research of Concrete and Reinforced Concrete Structures**
05/25-27 Greece	**5th Int'l Conference on Fluid Structure Interaction**
06/8-10 Portugal	**11th International Conference on Optimum Design of Structures and Materials Engineering**
06/15-17 Sweden	**2nd International Conference on Hot Sheet Metal Forming Of High-Performance Steel**
06/16-19 Greece	**NAFEMS World Congress**
06/23-24 USA	**PLM Summit North America 2008**
07/16-19 USA	**10th US National Congress on Computational Mechanics**
09/09-11 Greece	**3rd ANSA & µETA Int'l Conf**
11/14/-20 USA	**SC2009**

2010 USA: June 8-10th - Hosted by Livermore Software Technology Corp.
The 10th International LS-DYNA® Users Conference
The Hyatt Regency, Dearborn,

Oasys LS-DYNA Update Meeting in India
Wednesday 22nd April 2009

Oasys Ltd and nHance Engineering Solutions Pvt Ltd are pleased to announce the forthcoming Oasys LS-DYNA Update meeting being held on Wednesday 22nd April 2009 at The Pride Hotel in Pune, India.

This full day free of charge event covers both LS-DYNA and Oasys software and is a perfect opportunity to find out about current and future developments and how the software is being used in the engineering community. Presentations will also include developments in FE dummy and barrier models.

We are pleased to welcome Mr Sameer Joshi of TATA Motors Ltd and Mr Sairam Peddy of Mahindra & Mahindra Ltd, who will be speaking at this event.

Registration

To register for this event simply send an email to india.support@arup.com with your name, company/affiliation and telephone number.

VENUE:

The event will be held at the Pride Hotel in Pune, which is situated in the heart of the business district.

The Pride Hotel

Best Western Pride Hotel,

5 University Road

Shivajinagar, Pune- 41005, India

If you plan to stay over before or after the event, we are pleased to confirm that we have negotiated a special rate for attendees of the Oasys LS-DYNA Update meeting. Please contact us for more details.

Contact Details

If you have any queries regarding this event you can contact:

Ms Rafia Sultana

nhance Engineering Solutions (P) Ltd (Part of the Arup Group)

Plot No. 39, Ananth Info Park, HiTec City-Phase ll,

Madhapur, Hyderabad-500081,India

Tel: +91 (0) 40 44369797/8

Email: india.support@arup.com

Oasys LS-DYNA Update Meeting in India
Wednesday 22nd April 2009

AGENDA:

Registration for the event will commence at 9.30am with the presentations starting at 10am. The presentations will come to a close at 17.15pm.

Time	Session	Duration	Speaker Name, Company Name
09:30 - 10:00	Registration with tea/ coffee		
10:00 - 10:10	Introduction	10 min.	Prasad Nadipalli / Lavendra Singh, nhance (Arup)
10:10 - 11:00	Session 1: - LS-DYNA	50 min.	Brian Walker, Arup
11:00 - 11:30	Morning Break & Networking		
11:30 - 12:45	Session 2: - Oasys PRIMER	75 min.	Richard Sturt, Arup
12:45 - 14:00	Lunch & Networking		
14:00 - 15:30	Session 3: - Guest Lecture 1 - Oasys Post-Processing: D3PLOT, T/HIS & REPORTER - FE Models Update	30 min. 45 min. 15 min.	Sairam Peddy, Mahindra & Mahindra Maruthi Kotti, nhance (Arup) Brian Walker, Arup
15:30 - 16:00	Afternoon Break & Networking		
16:00 – 17:00	Session 4: - Guest Lecture 2 - Project Bloodhound	30 min. 30 min.	Sameer Joshi, Tata Motors Ltd Richard Sturt, Arup
17:00 - 17:15	Wrap-up with Raffle		
17:15 – 17:45	"Surgery" Time with Oasys LS-DYNA Team		

Website: See our website for further information www.oasys-software.com/dyna

Available Newsletters Magazines Tutorials

If you would like a listing, or removal please e-mail Anthony

Direct Link to the information sign up page.

ANSYS Newsletter	**ANSYS Advantage Magazine Sign up**	**BETA CAE Systems SA**	**ESI Group**
ETA	**Panasas**	**Cray**	**SGI Insider Newsletter**

Tutorials and Workshops

Tutorials and Workshop Page **Oasys LS-DYNA Environment**