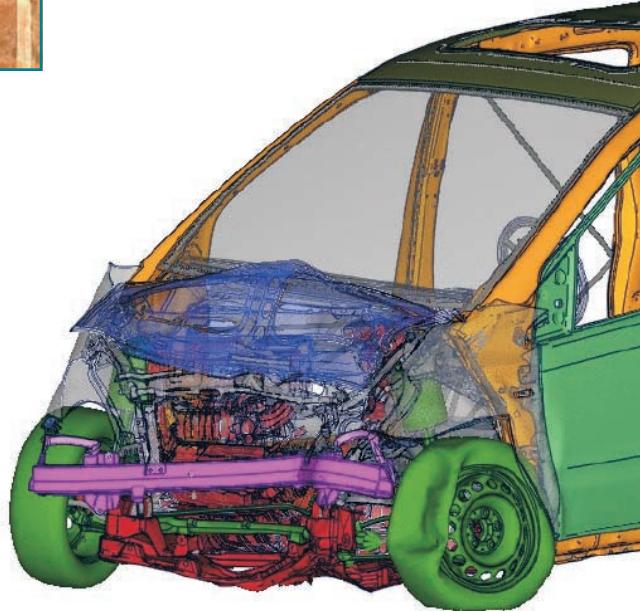
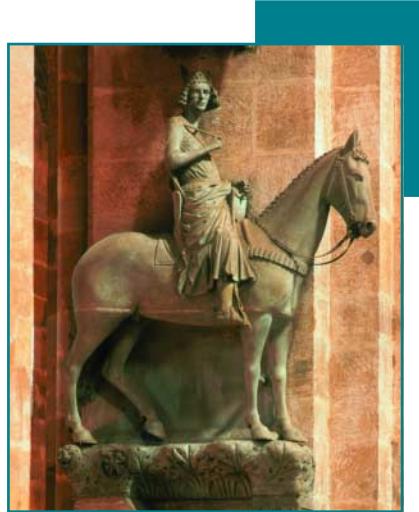


INVITATION – AGENDA

GERMAN

3rd LS-DYNA FORUM 2004

14th - 15th OCTOBER 2004, BAMBERG



By Courtesy of DaimlerChrysler AG

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Dear LS-DYNA User,

We wish to invite you to the 3rd LS-DYNA forum to the imperial city of Bamberg, awarded with the UNESCO world cultural heritage title.

The conference will provide an ideal forum for LS-DYNA users to obtain information on the various application areas of LS-DYNA, to exchange information and to share and discuss experiences.

Take the chance to meet Dr. John Hallquist, president of Livermore Software Technology Corporation (LSTC) as well as developers from LSTC, who give you an extensive insight in the newest developments of LS-DYNA.

The main emphasis of the conference is put on the LS-DYNA applications in automotive and aerospace industry. Furthermore we will highlight new features of LS-DYNA, for example the mesh-free methods EFG and SPH.

Remarkable is the fact that for all the presented topics papers regarding optimization and/or robustness analysis with LS-OPT will be presented. LS-OPT is available without any costs for LS-DYNA users!

The conference will be accompanied by an exhibition featuring the latest software and hardware developments related to LS-DYNA. In addition, the employees of DYNAmore, will be pleased to support you in both word and deed during the forum.

The conference will be held in German and English language. We asked the presenters to have the slides in English, approximately 50% of the talks will be in English.

We would love to welcome at the conference.

DYNAmore GmbH

Karl Schweizerhof

Prof. Karl Schweizerhof
President

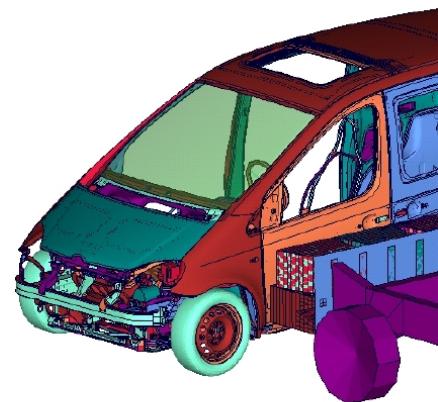


Bild mit freundlicher Genehmigung:
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AT A GLANCE

IN COOPERATION WITH

Wednesday, 13th October 2004

18:00	Registration
18:00	Informal welcome - beverages and snacks

Thursday, 14th October 2004

Exhibition	08:30	Registration	
	09:45 - 10:00	Plenary	Welcome
	10:00 - 10:45	Plenary	Keynote Presentations
	10:45 - 11:15		Refreshment break
	11:15 - 12:45	Plenary	Keynote Presentations
	12:45 - 14:10		Lunch
	14:10 - 15:50	Parallel sessions	Automotive / Crash Metal Forming IT
	15:50 - 16:30		Refreshment break
	16:30 - 18:10	Parallel sessions	Automotive / Materials Metal Forming IT
	20:00 - 23:00		Social Event

Friday, 15th October 2004

Exhibition	08:30 -10:10	Parallel sessions	New Applications	Passive Safety	CAE
	10:10 - 10:50		Refreshment break		
	10:50 - 12:10	Parallel sessions	Meshless Methods	Passive Safety	IT
	12:10 - 13:30		Lunch		
	13:30 - 14:30	Plenary	Keynote Presentations		
	14:30 - 15:00		Refreshment break		
	15:00 - 15:45	Plenary	Keynote Presentations		
	15:45 - 16:00		Farewell		

Exhibitors (July 2004)

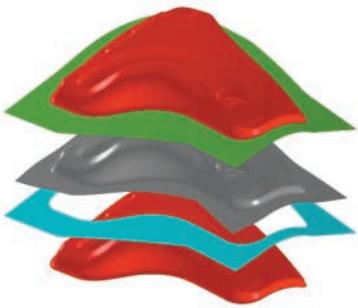
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NEC HPC Europe GmbH
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 Silicon Graphics GmbH
 T-Systems GmbH
 Verari Systems
 ...

MORE

AGENDA – THURSDAY, 14TH OCTOBER 2004



09:45 - 10:00

PLENARY

Welcome

U. Franz (DYNAmore GmbH)

10:00 - 10:45

10:45 - 11:15

11:15 - 11:45

11:45 - 12:15

12:15 - 12:45

12:45 - 14:10

KEYNOTE PRESENTATIONS

Recent Developments in LS-DYNA - I

J. Hallquist (Livermore Software Technology Corporation - LSTC)

Refreshment break

Fluid - Structure- Interaction – A Still Challenging Topic

Prof. E. Ramm, C. Förster, S. Genkinger (Universität Stuttgart); Prof.

Simulationsgestützte Kompensation der Rückfederung

Prof. K. Roll, K. Wiegand (DaimlerChrysler AG)

Robust Design for Crash at DaimlerChrysler Commercial Vehicles CAE

F. Günther (DaimlerChrysler AG); H. Müllerschön (DYNAmore GmbH);

Lunch

PARALLEL

AUTOMOTIVE / CRASH

14:10 - 14:30

Grundlagen der Simulation von Airbagsensierungssignalen

R. Visinescu, B. Gosolits (Adam Opel AG)

14:30 - 14:50

Nichtlineare Anwendungen im Bereich LS-DYNA Implizit

Prof. M. Pitzer (Peng GmbH)

14:50 - 15:10

Berücksichtigung von Blechumformergebnissen in der Crashberechnung

A. Haufe (DYNAmore GmbH); A. Zöller, T. Frank (DaimlerChrysler AG)

15:10 - 15:30

Application of Digital Tire Model for Vehicle Strength Evaluation

S. Tamura (Mazda Motor Corporation)

15:30 - 15:50

Creating Processes for CAE Automation

U. Jankowski, M. Sans, R. Emrich (Tecosim GmbH)

Refreshment break

PARALLEL

AUTOMOTIVE / MATERIALS

16:30 - 16:50

Crashworthiness Analysis of Structures made from Polymers

P. Du Bois (Consultant); M. Kösters, T. Frank, S. Kolling (DaimlerChrysler AG)

16:50 - 17:10

On the Impact Simulation of Safety Glass.

Part I: Single-layer Safety Glass

S. Kolling, B. Sonntag, N. B. Nguyen (DaimlerChrysler AG)

17:10 - 17:30

On the Impact Simulation of Safety Glass.

Part II: Laminated Safety Glass

S. Kolling, B. Sonntag, N. B. Nguyen (DaimlerChrysler AG)

17:30 - 17:50

On the Modelling of Rubber like Materials Subjected to Dynamic Loading

M. Timmel, Prof. M. Kaliske (Universität Leipzig);

S. Kolling (DaimlerChrysler AG)

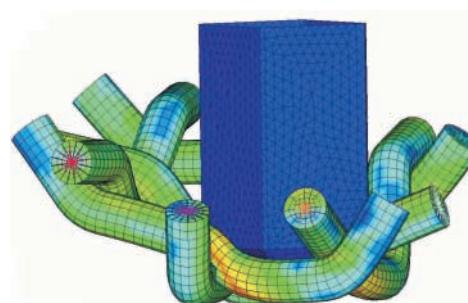
17:50 - 18:10

Modellierung von Kunststoffen - Identifikation von Materialparametern

A. Dangel (Universität Stuttgart); A. Hummel (DaimlerChrysler AG)

SOCIAL EVENT

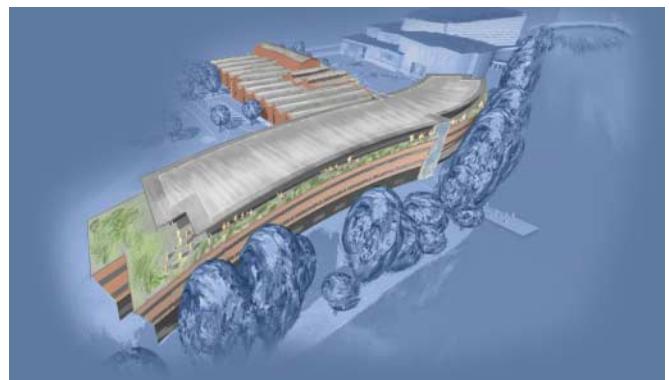
20:00 - 23:00



By Courtesy of
Universität Stuttgart, ITV Denkendorf

W. Wall (Universität München)

W. Roux (LSTC)



ECCB Event-Congress-Center-Bamberg and Welcome Hotel Bamberg

METAL FORMING

Finite Element Analysis of Press Forces at Stamping Processes using LS-DYNA and Comparison of Test Results
M. Stillger (Adam Opel AG)

Umform- und Rückfederungssimulation eines Strukturbauteils mit LS-DYNA
M. Wagner (BMW AG); B. Hochholdinger (DYNAmore GmbH)

FE-Simulation of Thermal Hydroforming
M. Keigler, Prof. H. Bauer, Prof. K. Harrison, A. De Silva (Aalen University of Applied Sciences)

Recent LS-PrePost Developments for Model Setup in Metal Forming
P. Ho, D. Winn, R. Chen, T. Eggleston, G. Zhang, J. Hua (LSTC)

Kriterien zur Bewertung des Mappings von Umform- auf Crashsimulation
M. Waedt, M. D'ottavio, T. Wallmersberger, Prof. B. Kröplin (Universität Stuttgart); K. Wolf, P. Post, J. Peetz, U. Scholl (Fraunhofer Institute for Algorithms and Scientific Computing)

METAL FORMING

Auslegung des Fertigungsprozesses „Biegen im Gesenk“ mit Hilfe der Fertigungs- und Rückfederungssimulation
J. Buchert (BMW AG)

The Quality of Virtual Prototypes
W. Rimkus, Prof. H. Bauer (Aalen University of Applied Sciences); H.-P. Betz, F. Seifarth (TRW Automotive GmbH)

Validierung der Rückfederungssimulation für hochfeste Stähle und Aluminium mit LS-DYNA¹⁾
B. Hochholdinger (DYNAmore GmbH); S. Kulp (Volkswagen AG)

Draw Bead Geometry Optimization on Springback of Sheet Forming
B. Ekici (Marmara University); E. Tekeli (BYM comp.)

Comparison of EFG and Standard Elements for Thermal-mechanical Metal-forming Simulations
R. Bötticher (Universität Hannover)

IT

Parallelisierung elementarer Algorithmen expliziter und impliziter Codes
Prof. U. Göhner (DYNAmore GmbH)

Bessere Clusterperformance durch Parastation Software
J. Krebs (Cluster Competence Center GmbH)

Neueste Entwicklungen bei IBM im HPC-Umfeld
A. Bömelburg (IBM GmbH)

Platform Choices for LS-DYNA
L. Fisher (Hewlett-Packard)



IT

Intel Enterprise Solutions
C. Morosanu (Intel GmbH)

CAE Workload optimieren - Grid Computing für Desktop Computer
M. Slominsky (Platform Computing GmbH)

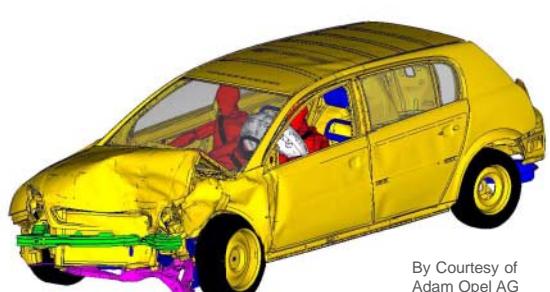
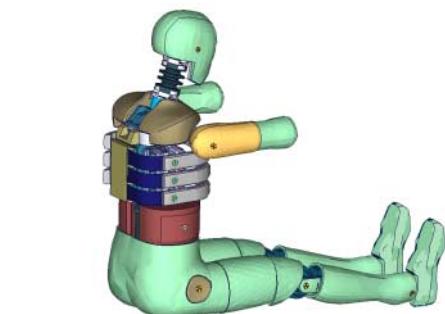
AMD Opteron & PGI Enable the World's Fastest LS-DYNA Performance
T. Wilkens (AMD)

Vergleich von LS-DYNA auf Infiniband und anderen Netzwerkarchitekturen
A. Findling (NEC High Performance Computing Europe GmbH)

Weiterentwicklung der Linux Cluster Umgebung bei EDAG
J. U. S. Hanlon (EDAG Engineering & Design AG); B. Platz (clucon cluster concepts)

¹⁾ Presentation subject to permission.
Final program could be subject to alterations.

AGENDA – FRIDAY, 15TH OCTOBER 2004



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Adam Opel AG

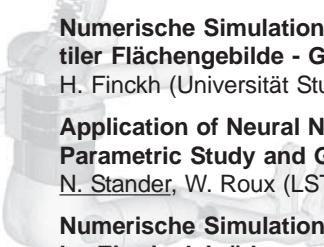
PARALLEL

08:30 - 08:50

NEW APPLICATIONS

Dynamische Einwirkungen auf Stahlstrukturen – Simulation einer Ansprengung auf eine mögliche U-Bootstruktur
N. Nawa (Howaldtswerke-Deutsche Werft AG);
T. Just (TNO Automotive GmbH)

08:50 - 09:10



Numerische Simulation der mechanischen Eigenschaften textiler Flächengebilde - Gewebeherstellung
H. Finckh (Universität Stuttgart)

09:10 - 09:30

**Application of Neural Networks in LS-OPT:
Parametric Study and Guidelines**
N. Stander, W. Roux (LSTC)

09:30 - 09:50

**Numerische Simulation formvariabler Strukturkonzepte axia-
ler Eintrittsleiträder von Turboverdichtern**
T. Müller, Prof. M. Lawrence (Universität Kassel)

09:50 - 10:10

**Zur Simulation von Pendelschlagversuchen an Mehr-
scheiben-Isolierverglasungen mit LS-DYNA**
S. Brendler (Landesgewerbeamt BW, Landesstelle für Bautechnik)

10:10 - 10:50

Refreshment break

PARALLEL

10:50 - 11:10

MESHLESS METHODS

**Element-Free-Galerkin Method (EFG) in LS-DYNA
- Implementation and Applications**
C. T. Wu (LSTC)

11:10 - 11:30

**Smooth-Particle-Hydrodynamics Method (SPH)
- Implementation and Applications**
J. L. Lacome (LSTC)

11:30 - 11:50

Simulation of Fuel Sloshing - Comparative Study
M. Vesenjak, Prof. Z. Ren, Z. Zunic (Universität Maribor);
A. Hummel (DaimlerChrysler AG)

11:50 - 12:10

Simulation von flüssigkeitsgefüllten Behältern unter Beschuß
P. Starke, G. Lemmen (EADS Deutschland GmbH)

12:10 - 13:30

Lunch

PLENARY

KEYNOTE PRESENTATIONS

13:30 - 14:00



An Integrated Experimental-Numerical Approach to Predictive
N. Petrinic, L. P. Weiss, P. Johnson, L. Wang, B. C. F. Elliott (University of

14:00 - 14:30

Composites - Materialmodellierung und Anwendung im Flugzeugbau
P. Middendorf (EADS Deutschland GmbH)

14:30 - 15:00

Refreshment break

15:00 - 15:45

Recent Developments in LS-DYNA - II
J. Hallquist (Livermore Software Technology Corporation - LSTC)

15:45 - 16:00

Farewell

Prof. K. Schweizerhof (DYNAmore GmbH / Universität Karlsruhe)

PASSIVE SAFETY

Increasing Efficiency in CAE Cockpit Development by using LS-DYNA for Explicit as well as Implicit Calculation with only one Model
 S. Dörr, M. Walter (Inprosim GmbH)

Advanced Airbagsimulation using Fluid-Structure-Interaction and the Eulerian Method in LS-DYNA
 A. Haufe, K. Weimar (DYNAmore GmbH)

New Dummy Models from FTSS
 B. Shah (FTSS Inc.)

The Development and Validation of Numerical Pedestrian Human Models ¹⁾
 R. de Lange, L. van Rooij (TNO Automotive);
 S. Wolski (TNO Automotive GmbH)

Neue flexible Methoden der Materialdatenermittlung für die dynamische Simulation
 R. Hafellner (advanced polymer engineering GmbH)

PASSIVE SAFETY

Fußgängerschutz: Gekoppelte LS-DYNA - Madymo Simulation des Fußgängeranpralls
 W. Mühlhuber, B. Mlekusch, F. Roth (AUDI AG)

Multidisziplinäre numerische Parameter- und Shape-optimierung von Karosseriebauteilen am Anwendungsbeispiel Fußgängerschutz
 H. Bachem, D. Schwarz, J. Bordasch (IKA Aachen)

Comparison of ES-2 and ES-2 RE Dummy - Expected Differences in Testing
 M. Pleschberger, A. Eichberger (Magna Steyr Engineering);
 U. Franz, S. Stahlschmidt (DYNAmore GmbH)

Enhanced Simulation Models for Lower Extremity Injuries
 H. Ipek (DaimlerChrysler AG); Prof. H. Steffan (Universität Graz); M. Hofinger (DSD Linz); B. Keding (FH Lausitz);
 Z. Karacay (Universität Stuttgart)

CAE

Using MSC.Nastran for Explicit FEM Simulations
 I. Neubauer, P. Doelfs (MSC.Software GmbH)

Automated Reporting and Workflow Management of LS-DYNA Simulations
 J. Seybold (Altair Engineering GmbH)

Middleware for Compute Farms
 R. Niemeier (science + computing ag)

Compression of LS-DYNA Simulation Results using FEMZIP
 C.-A. Thole, R. Iza-Teran, R. Lorentz (Fraunhofer Institute for Algorithms and Scientific Computing)

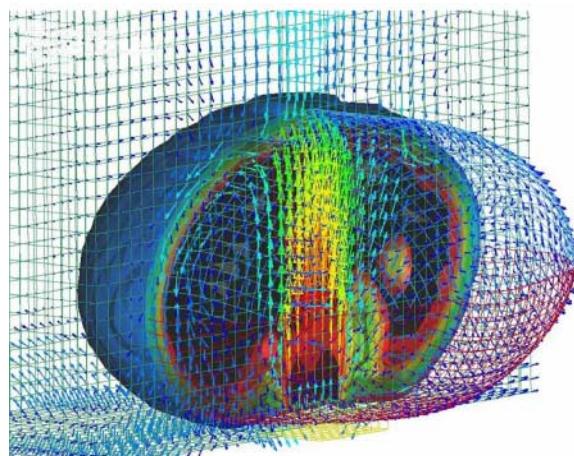
Verkürzen Sie ihre Entwicklungszeiten durch Einsatz von Hochleistungsrechnern und Tools zur automatischen Auswertung via Internet
 M. Sattler (T-Systems GmbH)

IT

Crash Simulation on the Cray XD1
 D. Obrist (Cray Inc.)

Schlüsselfertige Cluster-Lösungen für LS-DYNA mit Dienstleistungs-Angeboten
 K. Altmeyer (Fujitsu Siemens Computers GmbH)

Linux64 im CAE Umfeld
 J. Hellauer (Silicon Graphics GmbH)



Airbag: Fluid-Structure-Interaction with LS-DYNA

¹⁾ Presentation subject to permission.
 Final program could be subject to alterations.

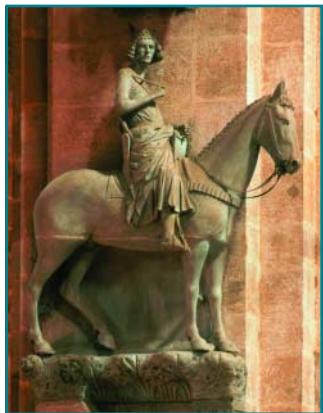
ORGANISATION / TRAVEL INFORMATION



City Center of Bamberg



View over Bamberg



„Bamberger Reiter“

Conference Location

ECCB Event-Congress-Center-Bamberg
Welcome Hotel Bamberg
Mußstraße 7, D-96047 Bamberg
Tel. +49 (0) 9 51 - 70 00 - 0
Fax +49 (0) 9 51 - 70 00 - 5 16
www.welcome-to-bamberg.com

Accommodation

At the hotel of the ECCB (Welcome Hotel Bamberg) we have arranged a special room rate for attendees until **31st August 2004** (single room 79.- Euro / Night incl. Breakfast). **Please reserve the hotel room by yourself.** Please use the keyword „**DYNAmore**“ when you book your room.

Registration fees

Industry participant:

480.- Euro / attendee (430.- Euro*)
Academic (university employees):
330.- Euro / attendee (300.- Euro*)
+ VAT if applicable

* Early bird registration until 30th July 2004
Fee includes: conference attendance, conference proceedings, social event, lunch, coffee breaks, beverages and snacks on 13th October 2004.

Hardware and Software Exhibition

Please request further information.

Conference Language

German and English

Registration / Confirmation

Please complete the registration form and send or fax it to:

DYNAmore GmbH, Kathleen Ryssel
Industriestr. 2, D-70565 Stuttgart
Tel. +49 (0) 7 11 - 45 96 00 - 0
Fax +49 (0) 7 11 - 45 96 00 - 29
e-mail: info@dynamore.de

Web registration also available at:
<http://www.dynamore.de>

Travel information

ECCB Event-Congress-Center-Bamberg and Welcome Hotel Bamberg

Pkw

West, (from Frankfurt or Würzburg)
Motorway A3 towards Würzburg/Nürnberg until the exit Bamberg; Take the B 505 until exit Memmelsdorf/Scheßlitz, go left towards Bamberg, follow the Memmelsdorfer Straße approximately 5 km. after the first big bridge take a left towards Konzert und Kongresshalle; after approximately 500 meters on the right side is the entrance to the hotel.

South, (Munich or Nuremberg)

Motorway A9 until junction Nürnberg there take the A3 towards Würzburg until junction Fürth/Erlangen, then take the A73 towards Bamberg. Take exit Memmelsdorf/Gartenstadt; left towards Bamberg; follow the Memmelsdorfer Straße approximately 5 km. after the first big bridge take a left towards Konzert – und Kongresshalle after approximately 500 meters on the right side is the entrance to the hotel.

East, (Berlin or Bayreuth)

Motorway A9 until motorway junction Bayreuth-Kulmbach, then take the A70 towards Bamberg until exit Hallstadt; left towards Bamberg, at the fourth traffic light, (across from VAG dealer), right into the Magazinstraße; after the second big bridge left towards Konzert- und Kongresshalle, after approximately 500 meters on the right side is the entrance to the hotel.

North, (Kassel or Schweinfurt)

Motorway A7 until the exit Schweinfurt-Werneck, then on the A70 towards Bamberg until exit Hallstadt; right towards Bamberg, at the fourth traffic light, (across from VAG dealer), right onto the Magazinstraße; after the second big bridge left towards Konzert- und Kongresshalle after approximately 500 meters on the right side is the entrance to the hotel.

Train

ICE station on route
Berlin - Nuremberg - Munich.

Plane

Airport Munich, Frankfurt, Nuremberg.

Please find more information about travelling and the city of Bamberg at:

www.bamberg.info

Please find more information about the conference at:

DYNA
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www.dynamore.de

REGISTRATION FORM

Please complete and fax to
or copy and send to

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DYNAmore GmbH, Industriestr. 2, D-70565 Stuttgart, Germany

- I would like to register for the conference

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Registration fee:

Industry participant: 480,- Euro / attendee (430,- Euro*);
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* Early bird registration until 21st July 2004; + VAT if applicable

- I will attend the informal welcome in the evening of the 13th October 2004.
(included in registration fee).

- I will not attend the conference. Please contact me - **I am interested in ...**

- the contents of the conference,
- the software LS-DYNA,
- special offers for LS-DYNA,
- products and services of DYNAmore.

- We intend to participate in the **hardware and software exhibition**. Please send us information for exhibitors.
- We are interested in **sponsoring** the conference. Please send information for sponsors.
- Please update me for **future events and news on LS-DYNA**.



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Name: _____

First name: _____

Company / University: _____

Department: _____

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Postal code, city: _____

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DYNAmore GmbH — Gesellschaft für FEM-Ingenieurdienstleistungen

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Offices on site

DaimlerChrysler AG, Sindelfingen
Phone +49 (0) 70 31 - 81 31 91

DaimlerChrysler AG, Untertürkheim
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