

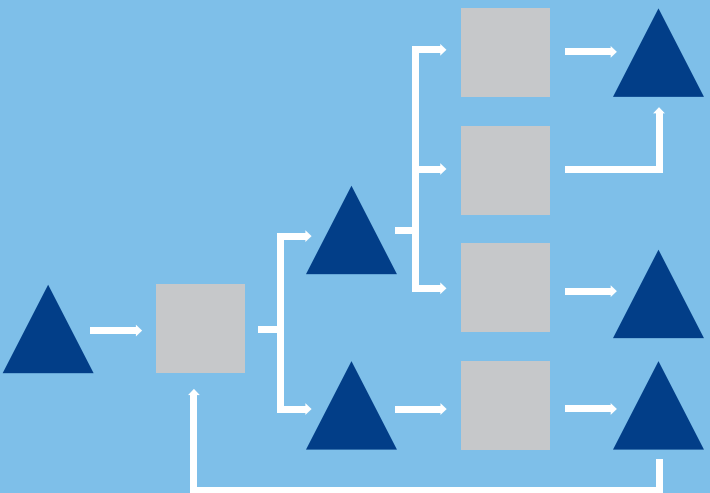
Program

8th International Heinz Nixdorf Symposium

Changing Paradigms: Advanced Manufacturing and Sustainable Logistics

April 21–22, 2010
Heinz Nixdorf MuseumsForum,
Paderborn, Germany

- Production Logistics
- Industrial Engineering
- Operations Research Techniques
- Simulation
- Humanitarian Logistics
- Supply Chain Management



■ The Heinz Nixdorf Symposium

The Heinz Nixdorf Symposium is an established biannual event of the Heinz Nixdorf Institute during which researchers and practitioners come together to present challenges from industry, discuss contributions from research institutions and develop novel solutions.

The Heinz Nixdorf Institute has been a research center within the University of Paderborn since 1987. Its research is aligned with the program "Dynamics, Mobility, Integration: En-route to the technical systems of tomorrow." In training and education the Heinz Nixdorf Institute is involved in many programs of study at the University of Paderborn. Today seven professors and 200 researchers work at the Heinz Nixdorf Institute.

The 8th International Heinz Nixdorf Symposium will take place on April 21–22 in the Heinz Nixdorf MuseumsForum in Paderborn. On April 21, distinguished professors and senior executives from large manufacturing and logistics companies will deliver invited speeches. On April 22, contributions are invited from both researchers and practitioners in the fields of manufacturing, logistics and supply chain management.

■ Manufacturing and Logistics

The pervasive integration along the supply chain has contributed to a hitherto unknown transparency of global markets. Through collaboration and coordination, enterprises have been offered new opportunities to access external purchasing and business markets. The emerging global procurement strategy can also be understood as a chance to rethink traditional strategic decisions, e.g. relocations of existing production facilities to markets with low labour costs. Instead, various benefits in terms of level demand, mutual capacity planning or improved event handling can be reaped.

Many enterprises reduce their vertical integration by outsourcing sections of their value chain. These contracted services of production result in higher transport volumes, increased complexity of supply processes and new requirements on logistics networks.

■ Changing Paradigms

Manufacturing and logistics undergo changes incurred by the development and implementation of advanced information technologies. Network-wide cooperation is required in order to take advantage of these shifting paradigms. At present, existing potentials such as intra-company knowledge are not adequately tapped.

Corporate networks are strengthened by the application of best practices and by sharing their experience with supply chain partners for achieving integral improvements. Ecological awareness influences existing processes by the application of green principles to logistics and supply chain management.

■ International Program Committee

The following distinguished professors and renowned researchers participate in the international program committee:

Prof. Dr.-Ing. habil. W. Dangelmaier,
Heinz Nixdorf Institute, Germany

Prof. Mauro Dell'Amico,
University of Modena e Reggio Emilia, Italy

Prof. ir. Ben Immers,
Katholieke Universiteit Leuven, Belgium

Prof. Dr. Herbert Kotzab,
Copenhagen Business School, Denmark

Dr. Albrecht Köhler
Knorr-Bremse AG, Germany

Prof. László Monostori,
MTA SZTAKI, Hungary

Prof. Dr. Jorge Pinho de Sousa,
University of Porto, Portugal

Prof. Dr.-Ing. habil. Dr.-Ing. E.h. Michael Schenk,
Fraunhofer IFF, Germany

Prof. Dr. Wilfried Sihn,
Fraunhofer Austria / TU Vienna, Austria

Prof. Dr. Wolfgang Stölzle,
University of St. Gallen, Switzerland

Dr. József Váncza,
MTA SZTAKI, Hungary

Prof. Dr. h.c. mult. Dr.-Ing. Hans-Peter Wiendahl,
Leibniz University of Hannover, Germany

Invited Speakers

Renowned professors and senior executives from the field of production logistics and manufacturing:



Prof. Dr.-Ing. habil. Wilhelm Dangelmaier
Heinz Nixdorf Institute

Since 1991 Prof. Dangelmaier holds the chair for Business Computing, especially CIM of the Heinz Nixdorf Institute. In 1985 he received the Joseph-von-Fraunhofer prize and in 1988 the ring of honor of the society of German Engineers. Since 2008 he is a member of the German Academy of Science and Engineering (acatech).



Dr. Albrecht Köhler
Knorr-Bremse AG

Dr. Köhler is member of the board of Knorr-Bremse Systems for Rail Vehicles, since July 2000 and is responsible for the Business Unit Mass Transit and operative topics such as Production and Quality Management. He is chairman of the Society for Production Management (Gf-PM) and engaged in IPA.



Prof. Dr. Dr. h.c. Werner Delfmann
University of Cologne

Prof. Delfmann studied mathematics and business administration. Since 1988 he is Professor and Director of the Dept. for Business Policy & Logistics at the University of Cologne. Additionally since 2008, he is adjunct Professor at ITLS, University of Sydney and chairman of Scientific Counsel of the German Association of Logistics (BVL).



Prof. Dr.-Ing. habil. Dr.-Ing. E.h. Michael Schenk
Fraunhofer IFF

Prof. Schenk is Director of the Fraunhofer IFF in Magdeburg, he holds the Chair of Logistics Systems and is Director of the Institute of Logistics and Material Handling Systems (ILM) at Otto von Guericke University Magdeburg. He is member of the VDI Steering Committee and of the BVL Scientific Advisory Board.



Prof. Dr.-Ing. Heinrich A. Flegel
Daimler AG

Prof. Flegel studied mechanical engineering. Since 1991 he holds lectures in computer science at the University of Stuttgart in Germany. Since 2003, he is member of the Supervisory Board of Daimler AG. Since the beginning of 2004 he is Chairman ManuFuture High Level Group. In 2007 he was elected for President of DVS.



Dr.-Ing. Stefan Schwinning
Miele & Cie. KG

Dr. Schwinning completed a degree in mechanical engineering and a doctorate at the Technical University of Dortmund. For 12 years he has been with Miele & Cie. KG in Gütersloh as Head of Distribution Logistics. He is member of the BDI and the brand association Berlin. He also heads the regional group in Ostwestfalen for the BVL.



Dr.-Ing. Ekkehard Gericke
Festo AG & Co. KG

Dr.-Ing. Gericke studied mechanical engineering. After his Ph.D. degree in production technology in 1980 he worked for BMW in production planning and assembly. In 2001 he joined Festo AG as a board member for Order Fulfilment. Since 2010 he is a senior consultant for Festo AG. In 2003 Festo won the German Logistics Award.



Prof. Dr. Wilfried Sihh
Fraunhofer Austria / TU Vienna

Prof. Sihh is professor for Industrial and Systems Engineering at the Vienna University of Technology. Since 2009, he is head of this institute. He is also managing director of the Fraunhofer Austria Research GmbH. His areas of expertise include production management, factory planning, life-cycle management, maintenance.



Dr. Götz Klink
A.T. Kearney GmbH

Dr. Klink obtained his diploma in business administration. He is partner at ATK and leads the Automotive and Aerospace & Defense Practice in German speaking countries. He has more than 15 years experience in consulting and he is head of the global initiative "powertrain of the future" which covers the development of different drives.



Prof. Dr. Wolfgang Stölzle
University of St. Gallen

Prof. Stölzle directs the chair for logistics management at University of St. Gallen. His field of research contains operational logistics, supply chain management and transport management. He is an elected member of the advisory board for traffic at the Federal Ministry of Transport, Building and Urban Development, of the BVL and the BME.

Program

Wednesday April 21, 2010

12:00 p.m. Lunch Snack

12:30 p.m. A Concept for an Accurate and Closely Coordinated Production
Prof. Dr.-Ing. habil. W. Dangelmaier
Heinz Nixdorf Institute

12:55 p.m. Challenges of Lean Supply Chain Management in a Small Series
Production Environment
Dr. A. Köhler
Knorr-Bremse AG

01:20 p.m. Coffee break

01:45 p.m. Product and Process Innovations for Sustainable Mobility
Prof. Dr.-Ing. H. A. Flegel
Daimler AG

02:10 p.m. Process Efficiency for Global Market Supply
Dr.-Ing. E. Gericke
Festo AG & Co. KG

02:35 p.m. Coffee break

03:00 p.m. Sustainable Logistic Processes at Miele to Supply International
Markets – Processes and Factors of Success
Dr.-Ing. S. Schwinning
Miele & Cie. KG

03:25 p.m. Deceleration, Decoupling, Consolidation – Key Elements for
more Sustainability in Logistics
Prof. Dr. Dr. h.c. W. Delfmann
University of Cologne

03:50 p.m. Coffee break

04:15 p.m. Sustainable and Energy-Efficient Cross-Company Logistic Models
– A Simulation Approach
Prof. Dr. W. Sihn
Fraunhofer Austria / TU Vienna

04:40 p.m. A Mesoscopic Approach to the Simulation of Logistics Systems
Prof. Dr.-Ing. habil. Dr.-Ing. E.h. M. Schenk
Fraunhofer IFF

05:05 p.m. Coffee break

05:30 p.m. Evaluating Supply Chain-Initiatives – Solutions to a Dilemma?
Prof. Dr. W. Stölzle
University of St. Gallen

05:55 p.m. The Influence of Structural Changes on the Automotive
Supply Chain
Dr. G. Klink
A.T. Kearney GmbH

06:20 p.m. End

Bus transfer to the evening event

06:50 p.m. 1st bus transfer from the Heinz Nixdorf MuseumsForum

07:05 p.m. 2nd bus transfer from the Heinz Nixdorf MuseumsForum

07:20 p.m. 3rd bus transfer from the Heinz Nixdorf MuseumsForum

07:20 p.m. Bus transfer from the Welcome Hotel

Evening Event

On the evening of the first day, we sincerely invite you to our evening event.



It will take place in the Artega assembly. In November 2008, Artega opened its state of the art manufacturing facility for production of the new German Artega GT sports car.



The new centre has been created on a 6,000 sq.m. site at the company's headquarters in Delbrueck, Westphalia. During the evening, you will get the opportunity to tour the Artega assembly hall.



The culinary treats of the evening will be served in the form of a delicious Italian flying buffet. There will also be a cocktail bar serving remarkable molecular cocktails for your indulgence.

From 10:00 p.m. onwards busses will stand by to take you back to Paderborn. Busses will run every 30 minutes until 1:00 a.m.

We are looking forward to spending an enjoyable, as well as interesting evening together with you.

Venue: Artega
Artegastraße 1
33129 Delbrück
<http://www.artega.de>

Program

Thursday April 22, 2010

08:30 a.m. Opening

09:00 a.m. A Conceptual Approach for Integrative Planning and Design of Logistics Structures and Production Plants in Competence-Cell-Based Networks

Prof. Dr.-Ing. E. Müller

Chemnitz University of Technology

09:20 a.m. Confronting Production Logistics' Perennial Conflicts

Prof. Dr. D. Van Oudheusden

KU Leuven

09:40 a.m. Challenges for the Provision of Process Data for the Virtual Factory

Prof. Dr.-Ing. G. Zülch

Karlsruhe Institute of Technology

10:00 a.m. Application of Operations Research Techniques to the Redesign of the Logistic Systems

Prof. Dr. J. Zak

Poznan University of Technology

10:20 a.m. Simulation in Production and Logistics: Trends, Solutions and Applications

Prof. Dr.-Ing. S. Wenzel

University of Kassel

10:40 a.m. Logistics in the Context of Humanitarian Operations

Dr. A. Blecken

Heinz Nixdorf Institute

11:00 a.m. Coffee break

Program

Thursday April 22, 2010

TRACK 1 | Supply Chain Management

- 11:30 a.m. A Model for Quantifying Impacts of Supply Chain Cost and Working Capital on the Company Value
M. Brandenburg, S. Seuring
- 12:00 p.m. Assessing the Effects of Assortment Complexity in Consumer Goods Supply Chains
C. Danne, P. Häusler
- 12:30 p.m. Lunch break in the HNF bistro
- 02:00 p.m. Dynamic Supply Loops – A Concept for flexible and faster Automotive Supply Network Management
A. Döring, J. Lentes, L. Siljemyr, W. Menzel, R. Ericsson
- 02:30 p.m. Development of a Lean Quality Management System – An Integrated Management System
A. Blecken, E. Maurantzas, A. Zobel
- 03:00 p.m. Integrated Design and Planning of Adaptive Supply Networks
D. Ivanov, J. Käschel, B. Sokolov
- 03:30 p.m. Coffee break
- 03:45 p.m. Lean Intra-Corporate Supply Chain Management for Complex Organizations
A. Fellhauer, A. Strozek
- 04:15 p.m. Up-to-date Supply Chain Management: The Coordinated (S, R) Order-up-to
S. Cannella, E. Ciancimino
- 04:45 p.m. Sustainable process management – Status quo and perspectives
D. Kundisch
- 05:15 p.m. End

TRACK 2 | Production Logistics / Industrial Engineering

- 11:30 a.m. Towards an Integrated Virtual Value Creation Chain in Sheet Metal Forming
T. Barth, M. Grauer, S. Karadgi, D. Metz, U. Müller, W. Schäfer
- 12:00 p.m. Using ISO 10303-224 Manufacturing Features for 3D Visualization and Stepwise Simulation of Manufacturing Processes
F. Jahn, D. Kretz, J. Militzer, T. Neumann, T. Teich
- 12:30 p.m. Lunch break in the HNF bistro
- 02:00 p.m. Combined Working Time Model Generation and Personnel Scheduling
M. Guenther, V. Nissen
- 02:30 p.m. Knowledge Oriented Implementation of Collaborative Supply Chain Management
M. Hake, P. Heinze
- 03:00 p.m. Reference Modeling of an IT-based Logistics System
I. Hausladen
- 03:30 p.m. Coffee break
- 03:45 p.m. An Autonomous Control Concept for Production Logistics
C. Zabel, B. Scholz-Reiter, H. Rekersbrink
- 04:15 p.m. Towards Agile Business Processes Based on the Internet of Things
M. Schief, B. Schmidt
- 04:45 p.m. Methods for the Calculation of CO2 in Logistics Activities
R. Schulz, H. Zadek
- 05:15 p.m. End

Program

Thursday April 22, 2010

TRACK 3 | Operations Research Techniques

11:30 a.m. A p-Robust Capacitated Network Design Model with Facility Disruptions

A. Lim, Z. Liu, P. Peng, L. Snyder, G. Songshan

12:00 p.m. A Resource Based Mixed Integer Modelling Approach for Integrated Operational Logistics Planning

J. P. Kempkes, A. Koberstein, L. Suhl

12:30 p.m. Lunch break in the HNF bistro

02:00 p.m. Job Shop Scheduling with Buffer Constraints and Jobs Consuming Variable Buffer Space

S. Voß, A. Witt

02:30 p.m. Maturity Progression Model for Sustainable Supply Chains

M. D. Ahmed, H. Reefke, D. Sundaram

03:00 p.m. Scenario Technique with Integer Programming for Sustainability in Manufacturing

A. Fügenschuh, P. Gausemeier, G. Seliger, S. Severengiz

03:30 p.m. Coffee break

03:45 p.m. Modelling Post-Carriage Transport Costs in Groupage Networks

N. Boone, T. Quisbrock

04:15 p.m. Discrete Lot-Sizing and Scheduling including Deterioration and Perishability Constraints

J. Pahl, S. Voß

04:45 p.m. Coordinated Production and Distribution to a Common Customer by Multiple Suppliers

C. Böhle

05:15 p.m. End

TRACK 4 | Simulation / Humanitarian Logistics

11:30 a.m. Developing and Maintaining Trust in Post-Disaster Hastily Formed Networks

G. Kovács, P. Tatham

12:00 p.m. Humanitarian Cluster Leads as Fourth-Party Logistics Providers

L.-M. Jensen

12:30 p.m. Lunch break in the HNF bistro

02:00 p.m. An Efficient Heuristic Algorithm for the Traveling Salesman Problem

P. Azimi, P. Daneshvar Ghorbai

02:30 p.m. Control of Disassembly Systems based on the Division of Labour by Means of Dynamically Adapting Routing Plans

J. Hrdina, G. Zülch

03:00 p.m. Integrated Production Program and Human Resource Allocation Planning of Sequenced Production Lines with Simulated Assessment

S. Auer, L. März, W. Sihm, H. Tutsch

03:30 p.m. Coffee break

03:45 p.m. Simulation of Container Traffic Flows at a Metropolitan Seaport

H. Reefke

04:15 p.m. Simulation of ITSM Processes as Training Tool Set

A. Schmidtmann

04:45 p.m. Controlled Simplification of Material Flow Simulation Models

D. Huber

05:15 p.m. End

Registration

For registration please use the conference management system on our website:

<http://www.hni.upb.de/symposium2010>

Fees:

- Regular registration fee: 375,00€
- Early registration fee: 300,00€
- Day Ticket: 210,00€
- Reduced*: 135,00€
- Students: 75,00€

* Further information about the reduced prices and the included services can be found on our website.

Hotel

We would be pleased to assist you in planning your stay in Paderborn during the symposium. We cooperate with the Welcome Hotel, which is located just a few walking minutes from the venue. Please do not hesitate to contact our organization team.

If you would like to plan your stay on your own, you will find hotel recommendations on the conference website.

Supporters

Stiftung Westfalen



Organization

Heinz Nixdorf Institute
Prof. Dr.-Ing. habil. Wilhelm Dangelmaier
Fuerstenallee 11
33102 Paderborn, Germany

Further information about the symposium can be found at:

<http://www.hni.upb.de/symposium2010>

E-mail: symposium@hni.upb.de

Phone: +49 5251 60 64 79

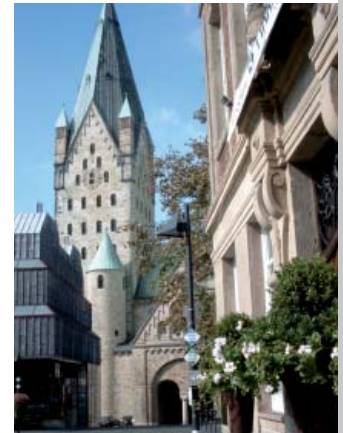
+49 5251 60 64 84

Venue

Heinz Nixdorf MuseumsForum
Fuerstenallee 7
33102 Paderborn, Germany
<http://en.hnf.de>

Paderborn

The charming city of Paderborn is situated at the heart of Germany, midway between the Northern Lowlands and the mountainous central region. The city's wider community extends across eastern North-Rhine Westphalia and encompasses a catchment area of half a million people, the majority of whom live in the more rural outlying villages. With over 1200 years of history to its credit, it is steeped in historical tradition which has shaped the cityscape. The many parks and green spaces beginning right by the shopping precinct at Pader Springs are much appreciated by city dwellers and visitors alike. Paderborn's appeal thus lies in the combination of many different qualities. Ancient and modern, sacred and spiritual, economic and political are all combined, each contributing to the city's distinctive character.



How to find us

Heinz Nixdorf MuseumsForum

Travelling by car

From the A33 motorway take the exit Paderborn-Elsen. Turn onto main road B1 towards Bad Lippspringe/Detmold. After approx. 1.5 km leave B1 at the exit Paderborn/Schloß Neuhaus. Continue straight head at the traffic lights (Heinz-Nixdorf-Ring, Dubelohstraße) onto the Heinz-Nixdorf-Ring and turn left at the next set of lights (Heinz-Nixdorf-Ring, Fuerstenallee) onto Fuerstenallee. The MuseumsForum is approx. 700 m along this street on the right-hand side.

Travelling by air

From Paderborn/Lippstadt Airport take bus No. 400/460 towards Paderborn Hbf (main station). From the main station take the bus No. 11 towards Thuner Siedlung and get off at the MuseumsForum stop (total journey time approx. 50 min).

Travelling by train

From Paderborn Hbf (main station) take bus No. 11 towards Thuner Siedlung and get off at the MuseumsForum stop (total journey time approx. 10 minutes).

