

AGENDA



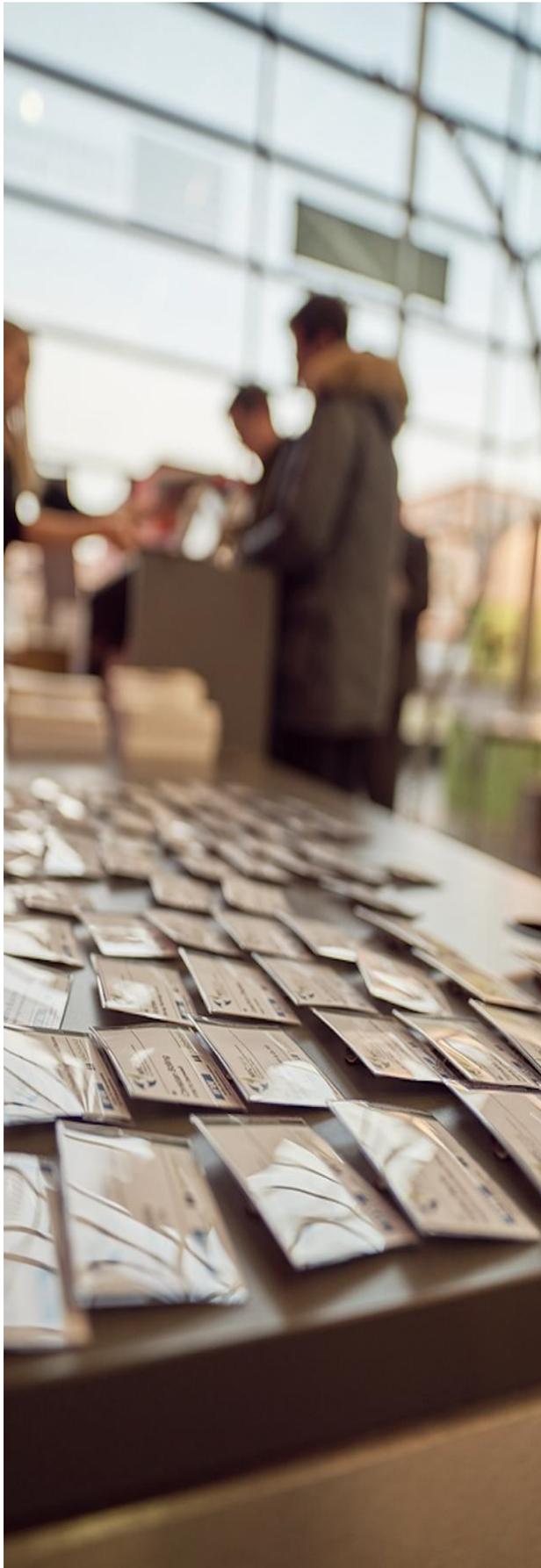
New Production Technologies in the Aerospace Industry

February 4th and 5th 2026 at the Hannover Centre
for Production Technology PZH (Garbsen, Germany)

MIN MANUFACTURING
INNOVATIONS NETWORK

IFW

Institut für Fertigungstechnik
und Werkzeugmaschinen



Dear Ladies and Gentlemen!

The “Machining Innovations Conference for Aerospace Industry” is set to return to the Hannover Centre for Production Technology, marking a special milestone as it celebrates its 25th anniversary and embodying the enduring spirit of innovation that has defined the MIC for a quarter of a century. We warmly invite you to join us for engaging discussions and presentations that explore cutting-edge approaches within the aerospace sector. In the face of ongoing geopolitical tensions and evolving global challenges, the aerospace industry continues to demonstrate remarkable resilience and adaptability. Its focus is now shifting towards a future shaped by groundbreaking technologies. These innovations are pivotal in driving the adoption of sustainable manufacturing practices, addressing the impacts of climate change, and accelerating the transition to a circular economy.

At the same time, the strategic integration of digitalization is unlocking new opportunities for value creation in production processes. This development emphasizes the necessity for continuous dialogue and collaboration to effectively tackle the multifaceted challenges and opportunities ahead. It also reinforces the industry's role in contributing to global sustainability and economic vitality.

Since its establishment in 2001, the annual “Machining Innovations Conference for Aerospace Industry,” hosted by the Institute of Production Engineering and Machine Tools (IFW) and the Manufacturing Innovations Network e.V. (MIN), has acted as a driving force for innovation. The conference continues to expand the horizons of manufacturing through vital industry exchanges and collaborative efforts.

The conference brings together international experts and researchers to foster dialogue and exchange ideas on advancements in manufacturing technology. On behalf of the Organizing Committee, we welcome you to the 25th Machining Innovations Conference for Aerospace Industry (MIC2026) on February 4th and 5th. Leading experts from industry and research will showcase cutting-edge trends, advanced knowledge, and recent re-search outcomes in the aerospace sector. The conference program will also feature a guided tour of the IFW laboratory. Additionally, young researchers will share their latest results during a poster session, while companies will present their newest innovations for the manufacturing industry in the exhibition area.

All contributions to the scientific session were single-blind peer-reviewed and published in MIC Proceedings, accessible via SSRN (www.ssrn.com).



Harald Schmitz



Prof. Dr.-Ing.
Berend Denkena

We proudly present the agenda for this year's conference. For further information, please visit our website:
www.mic-conference.com

We look forward to welcoming you to the 25th MIC!

Yours sincerely,



Harald Schmitz
Head of the Board of the
Manufacturing Innovations Network e.V.,
Manager at Airbus Aerostructures GmbH

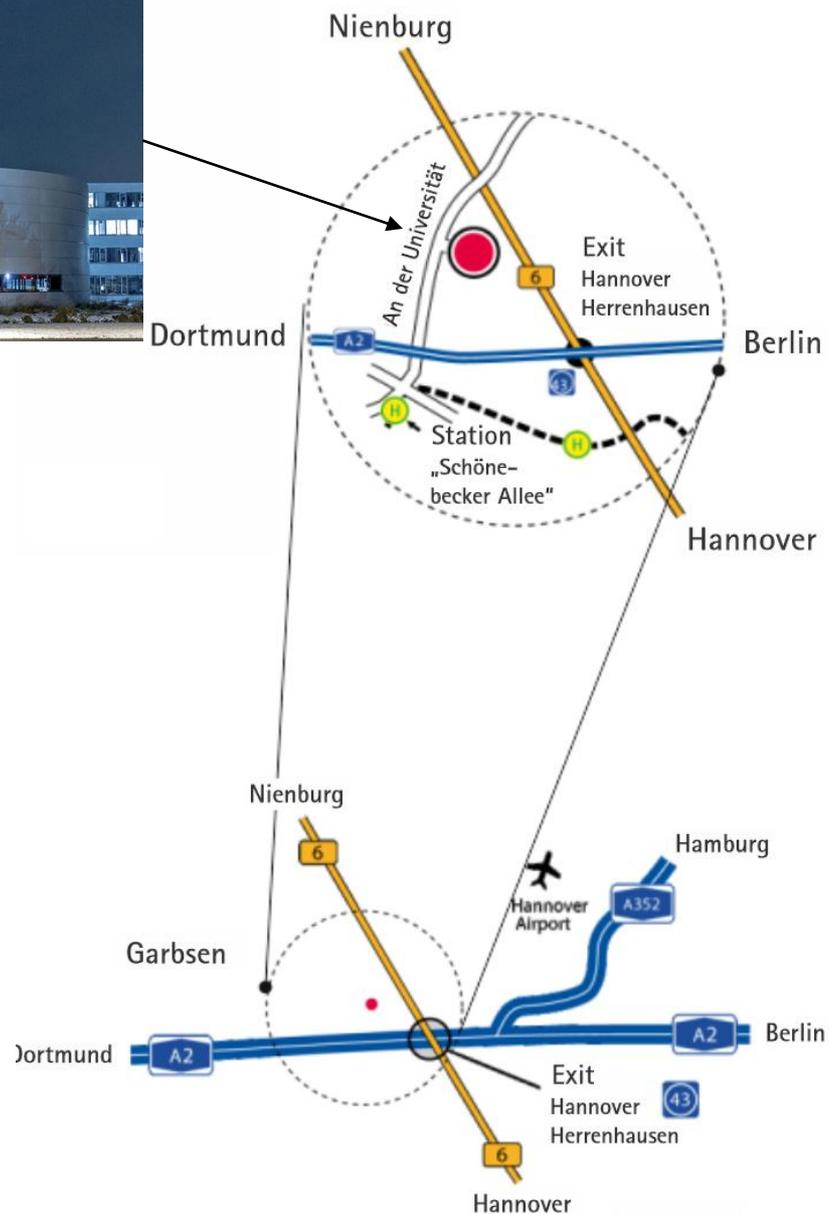


Prof. Dr.-Ing. Berend Denkena
Head of the Institute of Production
Engineering and Machine Tools, Leibniz Uni-
versität Hannover



Hannover Centre for Production Technology (PZH)
of the
Leibniz Universität Hannover
An der Universität 2
30823 Garbsen

www.pzh.uni-hannover.de



Arrival

Car:

Leave the freeway A2 at exit "Herrenhausen", then follow the federal road B6 in the direction of Nienburg. Turn left onto the street "An der Universität". Take the third exit of the traffic circle and use the parking area to your left.

Public transportation:

Hannover Central Station → Kröpcke (8 min by foot or by tram lines 1, 2, 3, 7, 8, or 9) → change to Line 4 in the direction of Garbsen and get off at Schönebecker Allee → take the shuttlebus 404. You will need a ticket for this trip that includes the ticket zones A and B. The price will be about 4,70 € for a one-way ticket.

Plane:

Hannover Airport or any other airport → use the public transportation to get to Hannover's Central Station → follow the instructions under public transportation or use a taxi (10 min drive)

Host

This conference is hosted by the Manufacturing Innovations Network e.V. in cooperation with the Institute of Production Engineering and Machine Tools of the Leibniz University Hannover, Germany.

Harald Schmitz

Head of the Board of the
Manufacturing Innovations Network e.V.,
Manager at Airbus Aerostructures GmbH

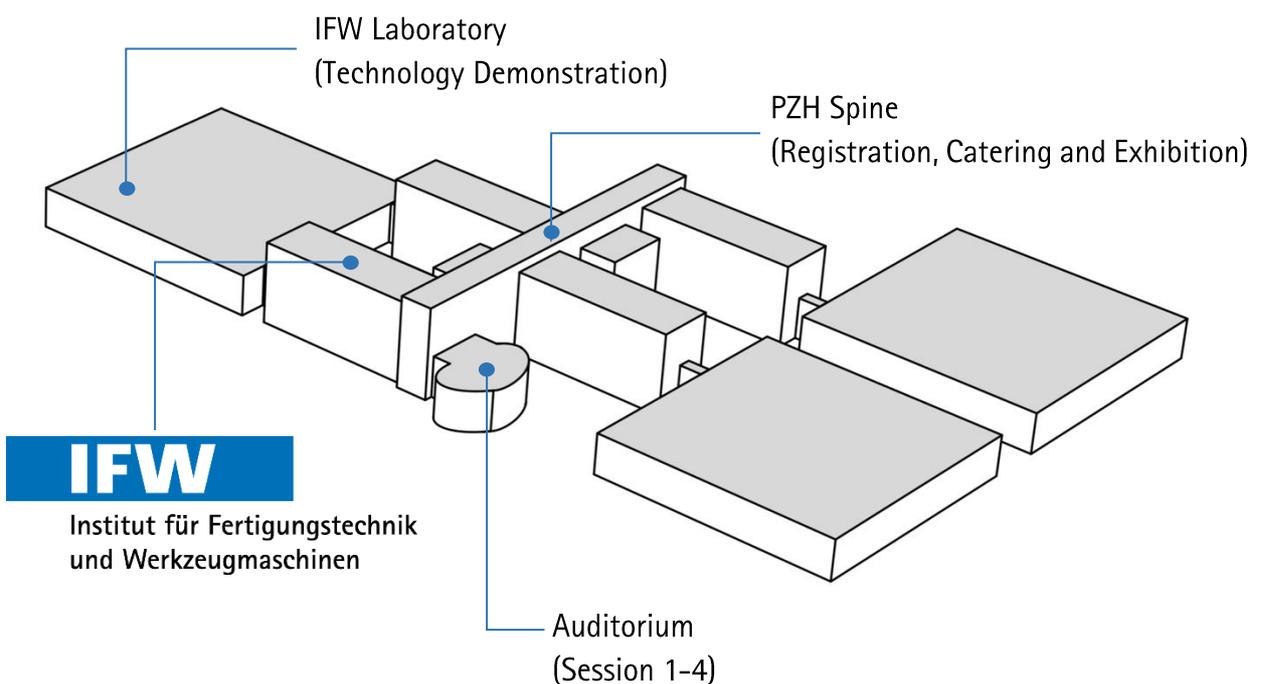
Prof. Dr.-Ing. Berend Denkena

Head of Institute of Production Engineering
and Machine Tools of the Leibniz Universität
Hannover

Conference Structure

4 th February 2026		5 th February 2026	
Keynotes	Exhibition	Keynotes	Exhibition
Session 1: Speeches of Industry & Science		Session 3: Speeches of Industry & Science	
Lunch Break & Technology Demonstration		Lunch Break	
Session 2: Speeches of Industry & Science		Session 4: Speeches of Industry & Science	
Evening Gala		End of Conference	

Overview of the PZH



Welcome Speech

09:00 a.m. Introduction Speech for the Machining Innovations Conference 2026
Prof. Dr.-Ing. Berend Denkena, Leibniz University Hannover

Keynote Speech

09:15 a.m. Aircraft Production in the Context of Changing Modern Requirements
Dr.-Ing. Jörg Schaupp, Site manager, Airbus Aerostructures Stade

Keynote Speech

09:45 a.m. Increased Productivity on Reliable Process for Aerospace Components
Masaki Kashiwagi, Aerospace Group Manager, Makino Milling Machine Co.

10:15 a.m. Introduction of the Exhibitors

10:30 a.m. Exhibition & Coffee Break

11:00 a.m. Ready for Take-Off? Additive Manufacturing of Titanium for Aerospace Applications
Prof. Dr.-Ing. Christoph Leyens, Fraunhofer Institute for Material and Beam Technology

11:30 a.m. Aerospace Innovation: Integrating Large, Safe and Sustainable Jet Engine Parts Through Additive Fabrication
Henrik Willgohs, Director BD & Sales, GKN Aerospace Material Solutions

12:00 p.m. Tool Systems for the Resource-Efficient Production of Structural Components in Aircraft Construction
Ingo von Puttkamer, Key Account Aircraft, Gühring

12:30 p.m. Lunch Break & Technology Demonstration

02:30 p.m. Fueling Aerospace Productivity with Advanced Digital Tool Data
Dr.-Ing. Alexander Krödel, Sr. Manager Digital Innovation Technology, Kennametal

03:00 p.m. Paper Presentation

03:30 p.m. Exhibition & Coffee Break

04:00 p.m. umati – Connecting the World of Machinery
Dr.-Ing. Alexander Broos, Head of Research and Technology, VDW e. V.

04:30 p.m. Virtual Solutions for Real-World Challenges: Simulation in the Manufacturing of Safety-Critical Aerospace Components
Dr.-Ing. Adina Grimmert, Representative Simulation of Production Processes, MTU Aero Engines

05:00 p.m. End of First Conference Day

07:30 p.m. Evening Gala
Altes Rathaus / Old Town Hall Hannover

Welcome Speech (Auditorium)

09:00 a.m. **Goals and Challenges in the Aerospace Industry**
Prof. Dr.-Ing. Jan Hendrik Dege, Manufacturing Innovations Network e.V.

Keynote Speech

09:15 a.m. **Challenges and Solutions of a Medium-Sized German Company in the Global Aviation Market**
Dr.-Ing. Kai Brüggemann, CEO, Deharde

Keynote Speech

09:45 a.m. **Facing Today's Challenges in Machining – A Mid-Sized Manufacturer's Perspective**
Caroline Pötzl, CEO, Kieselmann

10:15 a.m. **Exhibition & Coffee Break**

11:00 a.m. **The Next Level of Machine Tool Integrated Tool Wear Monitoring**
Dr.-Ing. Jens Kummetz, Director Technical Academy, HEIDENHAIN

11:30 a.m. **Smart Manufacturing in Aerospace: Connecting Robotic Machining Processes, Process Control, and Quality Monitoring with Digital Twin and AI**
Markus Stoyke, R&T Manager Robotics, Broetje-Automation Group

12:00 p.m. **Paper Presentation**

12:30 p.m. **Lunch Break and Poster Session**

02:00 p.m. **High Dynamic Turning 2.0 – Unlocking New Potentials**
Dr.-Ing. Volker Sellmeier, Head of Technology and Support, INDEX-Werke

02:30 p.m. **Reduction of Production Costs and Environmental Impact Through the Use of Compatible Component Cleaning / Metal Working Fluid Systems in Machining**
Stefan Joksch, Managing Director Technology and Production, Oemeta Chemische Werke

03:00 p.m. **Farewell Speech**
Prof. Dr.-Ing. Berend Denkena, Leibniz University Hannover

03:15 p.m. **End of the Conference**

45 min Guided Tours in the IFW Laboratory | Feb 4th 12:30 p.m.

Find out more about the research projects of the IFW. During guided tours through our laboratory, we show various projects featuring live demonstrations. This year's topics revolve around Sustainability and Digitalization.

1 How can advanced tool data improve Digital Twin Technology?

A cooperation between Kennametal and gemineers



2 CO₂ Transparency in Manufacturing



P. Krombach

3 Marker-Free Identification: Enabling Complete Traceability for Every Component



4 Redefining CAM: Autonomous Process Planning for Modern Manufacturing



5 How to unlock the full potential of ripper tools



5 SCALE Demonstration: Modular machine tool for large components



D. Fröhlich



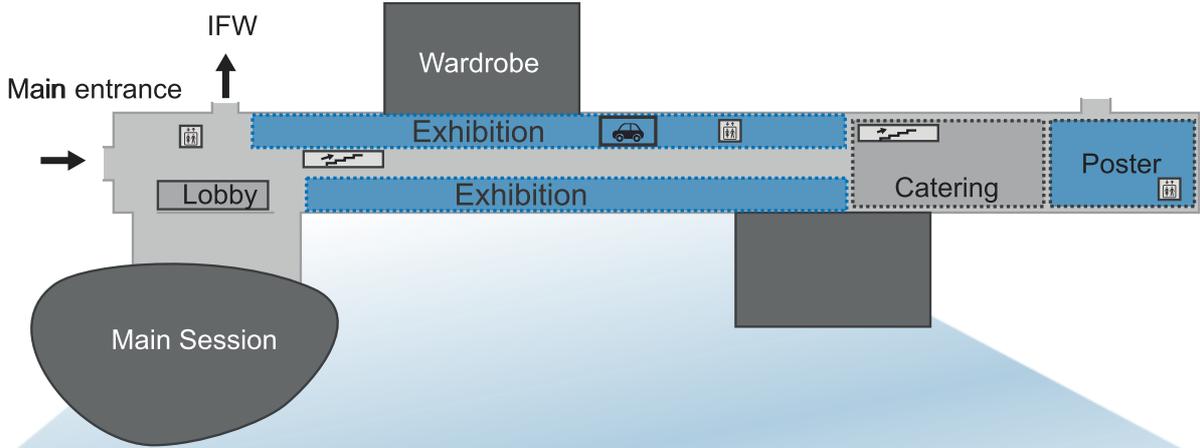
Exhibition

The exhibition at the MIC offers an opportunity to get in touch with companies from the industry. The exhibition area can be visited between lectures. Below are the companies that will be present as exhibitors at MIC2026.

This Year's Exhibitors



Exhibition Area



Scientific Topics | Feb 4th 03:00 p.m. and 5th at 12:30 p.m.

Experimental Framework for Investigating Manual Drilling in Aircraft Assembly

Malte Flehmke, Ferdinand Fritz, Sascha Fangmann, Jan H. Dege

Institute of Production Management und Technologie (IPMT), Hamburg University of Technology (TUHH) & Airbus Operations GmbH

Numerical and Experimental Analysis of Cutting Forces in Dry Gear Skiving of High Strength Steel 300M

Roman Funke, Valentin Wilhelm, Martin Dix

Fraunhofer Institute for Machine Tools and Forming Technology

Analysis of the Behavior of a Linear Axis with an Industrial Robot

Stephan Hansen, Nikolas Winter, Tobias Hamann, Robert Seifried and Wolfgang Hintze

Fraunhofer Institute for Manufacturing Technology and Advanced Materials & Institute of Mechanics and Ocean Engineering

Tool Condition Monitoring for Al-CFRP Stack Drilling: A Single-Sensor Approach using Spindle Power

Mika Schmid, Felix Hartmann

Fraunhofer IPA

Optimized NC Signal Selection for Sensorless Chatter Detection in Milling Using Principal Component Analysis

Eckart Uhlmann, Mitchel Polte, Rebecka Haidar, Martin Heper

Technische Universität Berlin, Institute for Machine Tools and Factory Management IWF & Fraunhofer Institute for Production Systems and Design Technology IPK

Closed-loop manufacturing – Bidirectional Data Continuity from Engineering to Machine

Dr.-Ing. Thomas Mücke

Siemens Industry Software GmbH

Influence of the cooling strategy on wear behavior and chip formation during external turning

Berend Denkena, Benjamin Bergmann, Marita Murrenhoff, Felix Zender

Institute of Production Engineering and Machine Tools



The Altes Rathaus Hannover offers an exceptional setting for an unforgettable Evening Gala. Situated in the heart of the historic Old Town, this beautifully restored landmark blends medieval brick-gothic architecture with contemporary elegance, creating a unique and atmospheric backdrop for tonight's event.

As Hannover's oldest surviving secular building, the Old Town Hall has been carefully revitalised over the centuries, most recently with a modern glass-covered courtyard that adds light and sophistication while preserving its timeless character.

We hope that you enjoy the selected menu. Shuttles will bring you to the evening gala and return you to the suggested accommodation afterward.

Program Overview | Feb 4th

07:30 p.m.	Opening of the Evening Gala
08:00 p.m.	Words of Professor Denkena
08:30 p.m.	Dinner
09:30 p.m.	Social Hour

Address

Schmiedestraße 3
30159 Hannover

For your stay in Hannover, we have selected hotels near the conference venue or the gala location. Please contact all hotels directly for bookings. It is not possible to book via the keyword "MIC2026". The accommodation options are listed below:

Concorde Hotel Am Leineschloss****

Am Markt 12

30159 Hannover

Phone: +49 511 357910

leineschloss@concorde-hotels.de



Hotel Landhaus am See****

Seeweg 27-29

30827 Garbsen

Phone: +49 5131 4686-0

info@landhausamsee.de



Novotel Suites Hannover City***

Rundestraße 9

30161 Hannover

Phone: +49 511 374500

h3755@accor.com



Feb. 4th:

Departure Location

Conference → Hotels:

- 5:30 p.m. PZH Garbsen
- 5:40 p.m. Hotel Landhaus am See
- 6:10 p.m. Novotel City
- 6:20 p.m. Concorde Hotel Leineschloss

Hotels → Evening Gala:

- 6:50 p.m. Hotel Landhaus am See
- 7:20 p.m. Novotel City
- 7:30 p.m. Old Town Hall, Hannover

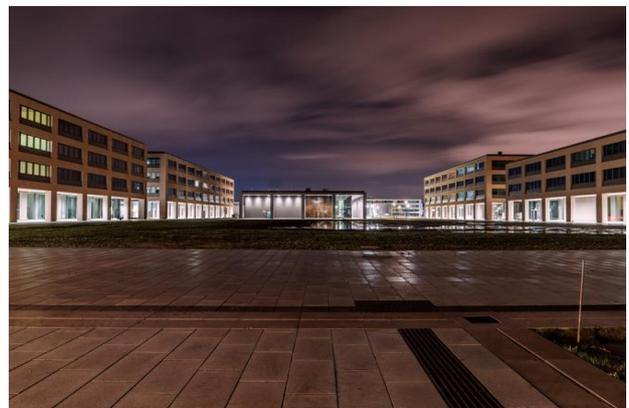
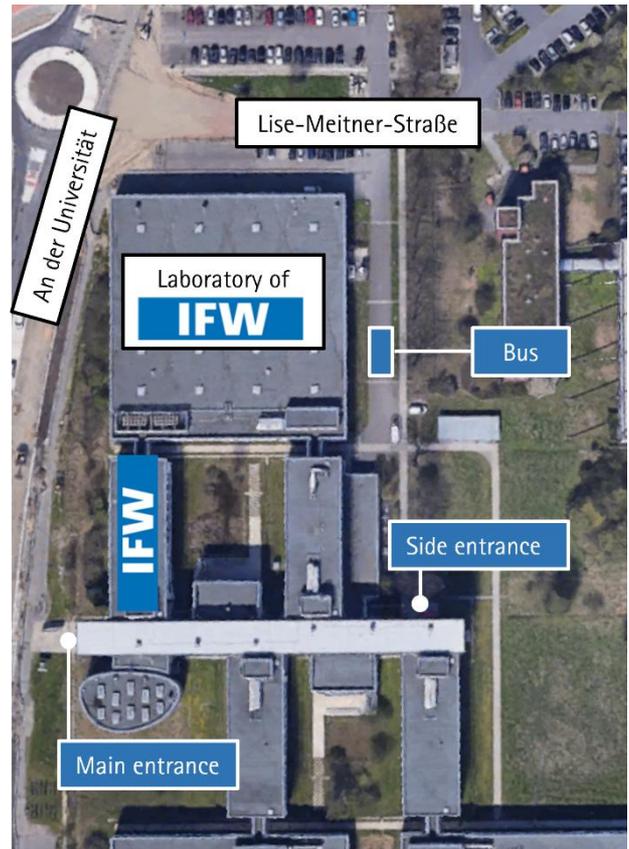
Evening Gala → Hotels:

Early Return:

- 10:00 p.m. Old Town Hall, Hannover
- 10:10 p.m. Novotel City
- 10:40 p.m. Hotel Landhaus am See

Late Return:

- 11:15 p.m. Old Town Hall, Hannover
- 11:25 p.m. Novotel City
- 11:55 p.m. Hotel Landhaus am See



Taxi

Bittner Taxengemeinschaft (Garbsen): +49 5131 2222
Hallo Taxi 3811 (Hanover): +49 511 3811
Taxi-Hannover-Airport (Hanover Airport): +49 163 294 1975

Wi-Fi

Name: UHEvent
Password: D5hBpJaQ

For further information, please visit the
website:

(<https://www.mic-conference.com/>)





MIC

Machining Innovations Conference
for Aerospace Industry

We look forward to welcoming you at the
PZH in Garbsen!