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Exhibitors Institutes

Technical University of Applied Sciences Würzburg-Schweinfurt (THWS)

Institute of Machine Design and Tribology (IMKT), Leibniz University Hannover

Mannheim Tribology Competence Center (KTM)

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Program

BEARING WORLD by FVA

6th International FVA Conference for

Rolling and Plain Bearings!

17-18 June 2026 in Dresden, Germany

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Ladies and Gentlemen,

We are delighted to be hosting the BEARING WORLD conference for the first time in our new roles as Chairmen of the Board, and we look forward to seeing you in Dresden on 17–18 June 2026.

Together with the international bearing community, we want to continue to develop BEARING WORLD as a platform for exchanging knowledge, fostering collaboration, and driving innovation, with the shared goal of advancing bearing technology through our combined expertise.

The demands placed on modern bearing systems are continually evolving. BEARING WORLD 2026 will highlight current challenges and forward-looking solutions, from advanced tribology and lubrication concepts to smart monitoring technologies and applications for electrified and high-speed systems.

See you in Dresden!

Prof. Dr.-Ing. Max Marian & Prof. Dr.-Ing. Oliver Koch,
Chairmen of the BEARING WORLD Board

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Scientific Board

More than thirty renowned scientists from 11 countries from all over the world are gathered here.
They review and evaluate the conference presentations before they are published in the Bearing World Springer Collection.
In addition, some of them will be available at the conference as moderators, speakers, and discussion partners.

Wednesday, 17 June 2026

Saal 3

09:45 Opening

Prof. Dr.-Ing. Max Marian, Institute of Machine Design and Tribology (IMKT), Leibniz University Hannover, Hannover, DE

Prof. Dr.-Ing. Oliver Koch, Chair of Machine Elements, Gears and Tribology (MEGT), University Kaiserslautern-Landau (RPTU), Kaiserslautern, DE

Christian Kunze, Research Association for Drive Technology (FVA e.V.), Frankfurt, DE

Keynotes

Session chair: Prof. Dr.-Ing. Max Marian, Institute of Machine Design and Tribology (IMKT), Leibniz University of Hannover, DE

10:00

Bearings for Intelligent and Clean Solutions.
Annika Ölme, SKF Group, Gothenburg, SE

10:30

The Relevance of Lifetime Solutions: Shaping the Use Phase for Superior Reliability and Longer Bearing Life.
Dr.-Ing. Franz Völkel, Schaeffler Technologies AG & Co. KG, DE

Wednesday, 17 June 2026

Saal 3

Electric Current Damage

Session chair: Prof. Dr.-Ing. Stephan Tremmel,
Faculty of Engineering Science, Engineering Design and CAD,
University Bayreuth, Germany

11:00 Bridging Scales: Enhanced Practical Modeling of Rolling Bearings by AI-Powered Prediction of EHL Contacts
Prof. Dr.-Ing. Max Marian, Leibniz University Hannover, Institute of Machine Design and Tribology (IMKT), Garbsen, DE

11:30 Effect of Particle Contamination in Lubricants on Electrically induced Failures in Cylindrical Roller Bearings
Jörn Christian Harling, RWTH Aachen University, Institute for Machine Elements and Systems Engineering (MSE), Aachen, DE

12:00 Statistical Analysis of Electrical Breakdown Behavior in Rolling Bearings Under Varying Operating Conditions
Philipp Kempf, University Kaiserslautern-Landau (RPTU), Chair of Machine Elements, Gears and Tribology (MEGT), Kaiserslautern, DE

12:30 Lunch break

Saal 2

Lubricants

Session chair: Prof. Dr. sc. ETH Alexander Hasse,
Institute of Design Engineering and Drive Technology (IKAT),
TU Chemnitz, Germany

Eco-Informed Grease Choice: Turning the Page on Lithium
Prof. Sergei Glavatskih, KTH Royal Institute of Technology Stockholm, SE

Oil Separation in Grease Lubricated Rolling Bearings
Frank Reichmann, Carl Bechem GmbH, Hagen, DE

Drop on Demand Lubrication: Feasibility, Achievements, and Challenges for Bearing Applications
Prof. Dr. ir. Kees Venner, University of Twente, Department Thermal fluid Engineering (TFE), Enschede, NL

Lunch break

Wednesday, 17 June 2026

Saal 3

Innovative Measurement Technology

Session chair: Dr.-Ing. Jens Dörner,
NSK DEUTSCHLAND GMBH, Germany

13:30 Finding Critical Hydrogen Concentrations Through In-Situ Hydrogen Charging of Bearings
Lisa-Marie Weniger, Luleå University of Technology, Department of Engineering Sciences and Mathematics, Division of Machine Elements, Luleå, SE

14:00 Characterization of Bearing Components Using Synchrotron Light Sources
Assoc. Prof. Dr. Claes Olsson, SKF AB, Göteborg, SE

14:30 Thin-Film Sensor Strain and Temperature Measurement in Cylindrical Roller Thrust Bearings
Marie Kleinhans, Leibniz University Hannover, Institute of Machine Design and Tribology (IMKT), Garbsen, DE

15:00 Predicting Bearing Fatigue with Eddy Current (NDT) - Remaining Service Life, Detecting Stress due to Operation
Prof. Dr.-Ing. Stephan Sommer, Technical University of Applied Sciences Würzburg-Schweinfurt (THWS), Faculty of Mechanical Engineering, Schweinfurt, DE
Dominik Stephan, Technical University of Applied Sciences Würzburg-Schweinfurt (THWS), Faculty of Mechanical Engineering, Schweinfurt, DE

15:30 Coffee break

Saal 2

Ring Creep

Session chair: Prof. Dr.-Ing. Torben Terwey,
Kiel University of Applied Sciences, Faculty of Mechanical Engineering, Germany

Simulation of Ring Creep in Tapered Roller Bearings on a Test Rig for Wind Turbine Bearing Units
Peter Große, Fraunhofer Institute for Wind Energy Systems (IWES), Bremerhaven, DE

Simulative Investigation of the Interactions of Torque and Non-Torque Loads of a WT Gearbox Regarding Planet Carrier Bearing Ring Creep
Pascal Bußkamp, RWTH Aachen University, Chair for Wind Power Drives (CWD), Aachen, DE
Malte Raddatz, RWTH Aachen University, Chair for Wind Power Drives (CWD), Aachen, DE

Bearing Ring Creep in EV Transmissions: Prediction and Prevention
Dr. Victor Brizmer, SKF Group, Houten, NL

Bearing Creep Simulation Considering a Local Change in Coefficient of Friction
Loc Le Duc, Chemnitz University of Technology, Institute of Design Engineering and Drive Technology (IKAT), Chemnitz, DE

Coffee break

Wednesday, 17 June 2026

Saal 3

Electrical Capacitance

Session Chair: Prof. Dr.-Ing. Oliver Koch,
Chair of Machine Elements, Gears and Tribology (MEGT),
University Kaiserslautern-Landau (RPTU), Germany

16:00 Influence of Surface Roughness on Ball Bearing Electrical Capacitance Under Elastohydrodynamic Lubrication
Hamid Ghorbani, KU Leuven, Department of Mechanical Engineering, Leuven, BE

16:30 Capacitance Calculation of Cylindrical Roller Bearings – Modeling of Cylinder-Raceway- and Cylinder-Flange-Contact
Jan Manteufel, Technical University of Darmstadt, Institute for Product Development and Machine Elements (pmd), Darmstadt, DE

18:30 Evening Event:
Beergarden Elbsegler
Große Meißner Straße 15
01097 Dresden, Germany

Saal 2

Bearings for High-Speed Applications

Session chair: Prof. Dr.-Ing. Franco Concli,
Free University of Bozen-Bolzano, Faculty of Engineering, Italy

Development of Dynamic Analysis Technology for High-Speed Tapered Roller Bearings
Ralf Petersen, NSK Deutschland GmbH, Ratingen, DE

Component Test Strategy for Rolling Bearings in High-Speed Drive Train Application
Bela Lehnhardt, Leibniz University Hannover, Institute of Machine Design and Tribology (IMKT), Garbsen, DE

Thursday, 18 June 2026

Saal 3

Keynotes

Session chair: Prof. Dr.-Ing. Oliver Koch, Chair of Machine Elements, Gears and Tribology (MEGT),
University Kaiserslautern-Landau (RPTU), Germany

08:30

From Regulation to Innovation: The Future of Roller Bearing Lubricants
Dennis Labisch, FUCHS LUBRICANTS GERMANY GmbH, Mannheim, DE

09:00

The Invention of the Bearing World: The Bearing World from the Perspective of the European Patent Office
Dr.-Ing. Vladimir Vesselinov, European Patent Office, Rijswijk, NL

Saal 3

Friction and Sustainability

Session chair: Matthias Djalek,
SKF GmbH, Germany

09:30 Higher Efficiency in Rolling Bearings: A Multidisciplinary Analysis Method for Detailed Cause-Effect Insights
Dr.-Ing. Kay Juckelandt, Schaeffler Technologies AG & Co. KG, Herzogenaurach, DE
Matthias Schubert, Schaeffler Technologies AG & Co. KG, Herzogenaurach, DE

10:00 Unified Friction Modeling Approach for Advanced Drivetrain Simulation
Dr.-Ing. Ralf Wuthenow, FVA GmbH, Frankfurt am Main, DE
Shashivar Syla, University Kaiserslautern-Landau (RPTU), Chair of Machine Elements, Gears and Tribology (MEGT), Kaiserslautern, DE

10:30 Revitalizing Bearings: Innovative Laser Cladding for Sustainable Repair
Dr.-Ing. Jens Dörner, NSK Deutschland GmbH, Ratingen, DE

11:00 Coffee break

Saal 2

Dynamic Effects

Session chair: Prof. Dr.-Ing. Max Marian,
Institute of Machine Design and Tribology (IMKT),
Leibniz University Hannover, Germany

The Effect of Different Oil Levels on Kinematics and Hydraulic Losses under Low-Load Operating Conditions in Spherical and Full Complement Roller Bearings
Kim Marius Brill, University Kaiserslautern-Landau (RPTU), Chair of Machine Elements, Gears and Tribology (MEGT), Kaiserslautern, DE
Thomas Petrzik, RWTH Aachen University, Institute for Machine Elements and Systems Engineering (MSE), Aachen, DE

Beyond Ideal Kinematics: A CFD Investigation of Non-Ideal Rolling Conditions in Roller Bearings
Prof. Dr.-Ing. Franco Concli, Free University of Bozen-Bolzano, Faculty of Engineering, Bolzano, IT

Contact Forces and Locations in Unstable Cage Motions of Outer Ring Guided Angular Contact Bearings
Christiane Marianne Melzer, Technical University Darmstadt, Institute of Production Management, Technology and Machine Tools (PTW), Darmstadt, DE

Coffee break

Thursday, 18 June 2026

Saal 3

Rolling Contact Fatigue

Session Chair: Martin Correns,
Schaeffler Technologies AG & Co. KG, Germany

11:30 Evaluation of Fatigue Criteria for Rolling Bearing Life Calculation
Dr.-Ing. Bernd Vierneusel, Schaeffler Technologies AG & Co. KG, Schweinfurt, DE

12:00 Bearing Remaining Life Prediction from NDT, a Key Step Forward for Remanufacturability Assessment
Dr. Predrag Andric, SKF Group, Houten, NL

12:30 Effect of Contact Conditions and (Surface) Stress on Surface Damage under Low Lambda Conditions
Andrzej Brzostowicz, NSK Polska Sp. z o.o., Kielce, PL

13:00 Damage Propagation using EHL and Hertzian Contact Profiles: a Comparison
Hamid Ghorbani, KU Leuven, Department of Mechanical Engineering, Leuven, BE

13:30 Lunch break

Saal 2

Coatings and Analysis Methods for Plain Bearings

Session chair: Prof. Sergei Glavatskih,
KTH Royal Institute of Technology, Sweden

Plain Bearings with Superlow Friction as Substitute for Roller Bearings
Dr. Stefan Makowski, Fraunhofer Institut for Material and Beam Technology IWS, Dresden, DE

Electro Magnetic Pulse Technology for Hydrodynamic Plain Bearings – Insights into an Innovative Coating Technology
Lukas Aitzetmüller, Miba Gleitlager Austria GmbH, Laakirchen, AT

Revolutionary Laser Technology: Direct Plating Sets New Standards in Metallic Coating
Andrea Berger, Fraunhofer Institute for Material and Beam Technology IWS, Dresden, DE

Wear and Life Predictions for Plain Bearings Considering Simulation-to-Reality Variability
Prof. Dr.-Ing. Florian König, Ghent University, Department of Electromechanical, Systems and Metal Engineering, Zwijnaarde, BE

Lunch break

Thursday, 18 June 2026

Saal 3

Large Bearings and Materials

Session chair: Dr.-Ing. Ralf Dinter,
Flender GmbH, Germany

14:30 New Combinations of Steels and Carbonitriding for Additional Performance of E-PWT Reducer Applications
Dr. Christine Sidoroff, NTN Europe, ANNECY, FR

15:00 SKF Infinium – Designed for Circularity and Superior Performance
Dr. Marcus Andersson, SKF Group, Göteborg, SE

15:30 Tapered Roller Main Bearings in Wind Turbines: Integrated Design Process from Pre-Design to Final Validation
Prof. Dr.-Ing. Jan Torben Terwey, Kiel University of Applied Sciences, Faculty of Mechanical Engineering, Kiel, DE

16:00 From Theory to Performance: Predicting Vibration in Four-Point Contact Slewing Bearings
Martin Eizmendi, University of the Basque Country, Department of Mechanical Engineering, Bilbao, ES

16:30 End of conference

Saal 2

Journal Bearings for Planetary Gearboxes

Session chair: Dr. Philipp Bergmann,
Miba Bearing Group, Austria

Holistic FE Based Multi Body Simulation of Running In Processes in Planetary Journal Bearings of Wind Turbine Gearboxes
Marc Janousek, AVL Deutschland GmbH, Mainz-Kastel, DE

Faster Dynamic Analysis of Planetary Journal Bearings in Wind Turbine Gearboxes
Mattheus Lucassen, RWTH Aachen University, Institute for Machine Elements and Systems Engineering (MSE), Aachen, DE

Impact of Surface Roughness on the Transition to Mixed Friction in Planetary Bearings
Dr.-Ing. Maximilian Prölß, COB Bearings Germany GmbH, Desselbrunn, AT

Condition Monitoring of Planetary Journal Bearings in Wind Turbine Gearboxes based on Vibration and Acoustic Emission Measurements – Results of a Gearbox Test
Tim Scholz, RWTH Aachen University, Chair for Wind Power Drives (CWD), Aachen, DE
Akash Deo, KS Gleitlager GmbH, Sankt Leon-Rot, DE

End of conference

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