



**DGfB** | 14<sup>th</sup> Congress of  
2026 | the German Society  
for Biomechanics

18.-20. März, Hamburg



**PROGRAMME**

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## WELCOME

Dear colleagues,

It is an incredible pleasure and honour for our institute to host the DGfB 2026 conference in Hamburg, which is an event driven by its diversity and interdisciplinarity. We are looking forward to three days of intensive exchange, exciting discussions, constructive criticism, and fun.

On behalf of the Institute of Biomechanics I am excited to welcome you at the TU Hamburg!

Gerd Huber; DGfB president

## ABOUT DGfB

The aim of the DGfB is to further develop and promote bio-mechanics in its central importance for biology, medicine, and sports. We focus on exchanging ideas among scientists and supporting young researchers. Amid growing controversy on health topics, providing guidance to the public will gain importance.

## DGfB BOARD OF DIRECTORS

**President;** Dr. Gerd Huber; *TU Hamburg*

**Vice president;** Prof. Dr. J. Philippe Kretzer; *Heidelberg University Hospital*

**President elect;** Prof. Dr. Anja Niehoff; *German Sport University Cologne*

**Secretary;** Priv. Doz. Dr. Marianne Hollensteiner; *BG Unfallklinik Murnau*

**Treasurer;** Prof. Dr. Uwe Wolfram; *Clausthal University of Technology*

**Liaison for young researchers;** Prof. Dr. Stefanie Hölscher-Dohrt; *University Hospital Würzburg*

**Liaison for industry;** Dr. Bastian Welke; *Hannover Medical School*

**Web page and data base;** Prof. Dr. Christof Hurschler; *Hannover Medical School*

**Social media representative;** Lasse Hansen; *German Sport University Cologne*

# CONFERENCE INFORMATION

## Conference Venue Address:

### TUHH Hamburg University of Technology

Am Schwarzenberg-Campus 5  
Building H  
21073 Hamburg  
Germany

We recommend using the services of Hamburger Verkehrsverbund (HVV). Tickets can be conveniently purchased online at: <https://www.hvv.de/en> For participants attending the event, the day ticket is generally the most convenient option.

#### Ticket options (online prices):

- Single ride: EUR 3.81
- Day ticket: EUR 7.63

#### The nearest stops to the TUHH campus are:

- Kasernenstraße (bus)
- Heimfeld / TUHH (rapid railway S3 or S5)



## Official Conference Languages

German and English (check conference programme for more details)

## Getting to TUHH and around Hamburg

The campus of Hamburg University of Technology (TUHH) is easily accessible from the city center of Hamburg by public transportation.

## Registration opening hours

### Wednesday, 18 March 2026

8:00 AM – 5:00 PM

### Thursday, 19 March 2026

8:00 AM – 5:00 PM

### Friday, 20 March 2026

8:00 AM – 1:00 PM

## Certificate of Attendance

The certificate of attendance will be available for download after the event through the conference platform ([www.conftool.com/dgfb2026](http://www.conftool.com/dgfb2026)). All delegates will be notified by email when the certificates are ready for download.

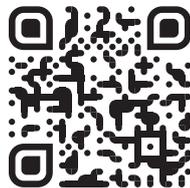
### Mobile App



[Download Conference4 me](#),  
the official app to:

- Browse the programme and build your own agenda
- Access maps, updates, and conference materials
- Receive real-time notifications
- Give your input to organisers through surveys
- View abstracts linked to each session

Download it  
for iOS or Android  
before the event



## Abstract book

All abstracts are directly available in the interactive conference programme [www.conftool.com/dgfb2026/sessions.php](http://www.conftool.com/dgfb2026/sessions.php).

You can also find the link to each abstract in the **conference app** by clicking on the presentation you are looking for and going to “External Resource”.

## Badges

All participants and exhibitors are kindly requested to always wear their name badge throughout the conference also during the social events.

## Lunches and Coffee breaks

Lunch on Thursday, 19 March and coffee breaks will be served in the foyer of building H.

Exceptions:

- on Wednesday, 18 March lunch for attendees of GAMMA Workshop and Young researcher workshop only will be served at in building I. During registration you will receive a voucher that will include instructions and locations, and that you need to bring to redeem your meal.
- on Wednesday, 18 March and Thursday, 20 March no lunch will be provided.

## Exhibition

The most important companies in the biomechanics will present their latest products and developments in the field. The exhibition will be open during the following hours:

### Wednesday, 18 March 2026

3:00 PM – 7:30 PM

### Thursday, 19 March 2026

8:00 AM – 6:00 PM

### Friday, 20 March 2026

8:00 AM – 2:00 PM

## Internet and Wi-Fi



Free Wi-Fi is available  
at the Conference venue.

**WLAN Name:** DGfB2026

**Password:** HYY2r5LU

## Presentations upload

Presentations have been collected prior to the conference through the Conftool platform. Onsite upload must be completed **at least 1 hour before the start of your session**, during breaks, directly in the meeting room where your presentation is scheduled.



## Poster sessions

All posters are in the H0.07 and H0.09. Each poster has a specific number; the list of all posters is available [here](#).

### **Poster session 1: Motion analysis**

Wednesday, 18 March; 6:15 PM – 07:00 PM  
H0.07

### **Poster session 2: Clinical and translational biomechanics**

Wednesday, 18 March; 6:15 PM – 7:00 PM  
H0.09

### **Poster session 3: Musculoskeletal system**

Thursday, 19 March, 3:45 PM – 4:30 PM  
H0-07

### **Poster session 4: Soft Tissue Engineering and Biomechanics**

Thursday, 19 March, 3:45 PM – 4:30 PM  
H0.09

### **Poster session 5: Orthopaedic Implants and Fracture Healing**

Friday, 20 March, 10:30 AM – 11:15 AM  
H0.09

If you are presenting on Wednesday, please set up your poster by 5:00 PM on Wednesday, 18 March.

If you are presenting on Thursday or Friday, please set up your poster by 2:00 PM on Thursday, 19 March.

The **short oral presentation for best review scoring posters** will take place in room H0.09 with the following schedule:

Wednesday, 18 March; PS1 and PS2; 6:15 PM – 06:30 PM

Thursday, 19 March; PS 3 and PS4; 3:45 PM – 4:00 PM

Friday, 20 March; PS5; 10:30 AM – 10:45 AM

All posters must be removed by 1:00 PM on Friday, 20 March.

The conference secretariat takes no responsibility for left behind or damaged posters.

# DETAILED PROGRAMME

## Wednesday, 18 March 2026

9:00am – 1:00pm	<b>GAMMA workshop</b> Location: Audimax	<b>Nachwuchsworkshop</b> Location: Ditze Hall
1:00pm – 1:45pm	<b>Lunch break</b> (for workshop participants only) Location: Mensa	<b>A guided tour at TUHH with the congress chair</b>
1:45pm – 3:15pm	<b>A1: Musculoskeletal system I</b> Location: Audimax	<b>D1: Clinical biomechanics</b> Location: Ditze Hall
3:20pm – 4:30pm	<b>A2: Musculoskeletal system II</b> Location: Audimax	<b>D2: Rehabilitation and assistive devices</b> Location: Ditze Hall
4:30pm – 5:00pm	<b>Coffee break</b> Location: Foyer	
5:00pm – 5:40pm	<b>Welcome</b> Location: Audimax	
5:40pm – 6:10pm	<b>German biomechanics- an inventory</b> Location: Audimax	
6:15pm – 7:00pm	<b>Poster session 1: Motion analysis and Poster session 2: Clinical and translational biomechanics</b> Location: H0.07 and H0.09	
6:15pm – 7:45pm	<b>Welcome reception</b> Location: Foyer	
8:00pm – 10:30pm	<b>Rookies night</b> Location: PHNX hotel	

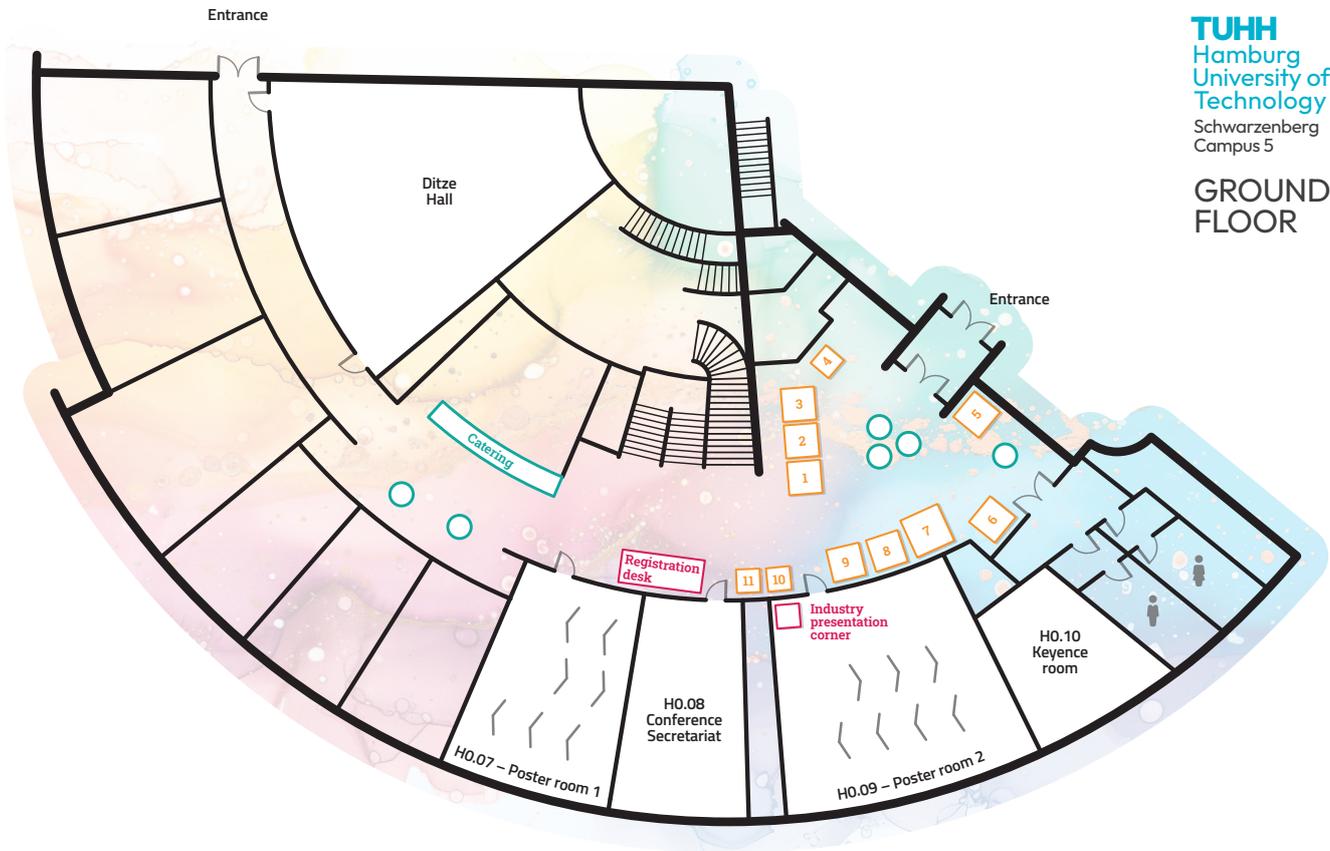
## Thursday, 19 March 2026

8:30am – 9:50am	<b>A3: Tribology / Jaw Biomechanics</b> Location: Audimax	<b>D3: Sports biomechanics</b> Location: Ditze Hall
9:50am – 10:20am	<b>Coffee break</b> Location: Foyer	
10:20am – 11:35am	<b>A4: Fracture healing+1</b> Location: Audimax	<b>D4: Motion analysis I</b> Location: Ditze Hall
11:45am – 12:45pm	<b>DGfB General Meeting</b> Location: Audimax	<b>Industry Presentation Corner: Industry Presentation Corner</b> Location: H0.09
12:45pm – 1:15pm	<b>Lunch</b> Location: Foyer	
1:15pm – 2:30pm	<b>A5: Young Investigator Award</b> Location: Audimax	
2:30pm – 3:40pm	<b>Quo-Vadis - Panel debate</b> Location: Audimax	
3:45pm – 4:30pm	<b>Coffee break</b> Location: Foyer	<b>Poster session 3: Musculoskeletal system and Poster session 4: Soft Tissue Engineering and Biomechanics</b> Location: H0.07 and H0.09
4:30pm – 6:00pm	<b>A6: Implants</b> Location: Audimax	<b>D6: Motion analysis II</b> Location: Ditze Hall
7:30pm – 11:30pm	<b>Conference dinner and awards ceremony</b> Location: MS Hanseatic, Hamburg Harbour	

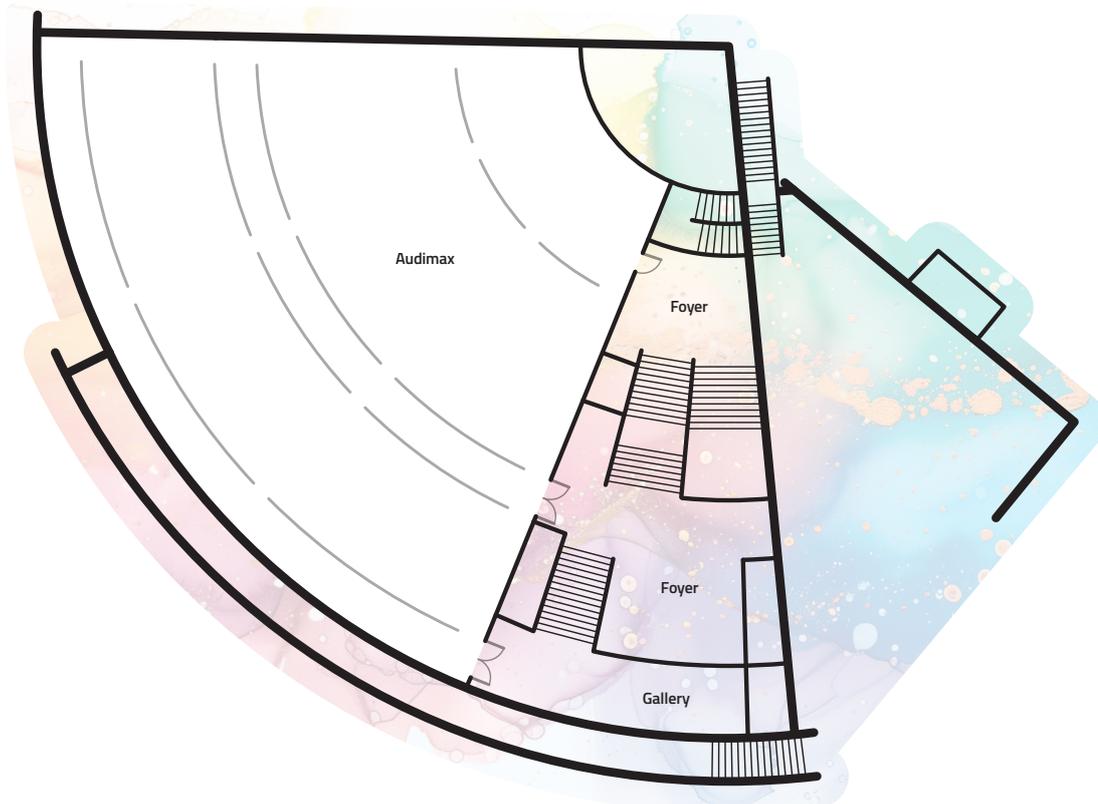
## Friday, 20 March 2026

8:30am – 9:50am	<b>A7: In silico studies</b> Location: Audimax	<b>D7: Joint replacement I</b> Location: Ditze Hall
9:55am – 10:25am	<b>Presidential Lecture: Biomechanik im Wandel: Bewegung, Mechanik, Biologie</b> Location: Audimax	
10:30am – 11:15am	<b>Coffee break</b> Location: Foyer	<b>Poster session 5: Orthopaedic Implants and Fracture Healing</b> Location: H0.09
11:15am- 12:45pm	<b>A8: Tissue biomechanics</b> Location: Audimax	<b>D8: Joint replacement II</b> Location: Ditze Hall
12:45pm – 1:00pm	<b>Closing ceremony</b> Location: Audimax	

GROUND  
FLOOR



1<sup>st</sup> FLOOR



# SPECIAL SESSIONS AT DGfB 2026

## Welcome

**Wednesday, 18 March 5:00 PM – 5:40 PM, Audimax**

The hosts Dr. Gerd Huber (DGfB president) and Prof. Sara Checa (co-chair) keep their opening speeches short, leaving time for Jana Gugenheimer on the grand piano and Martin Munninghoff on the cello.

## German biomechanics – an inventory

**Wednesday, 18 March, 5:40 PM – 6:10 PM, Audimax**

Dear friends will take a look at our society from the outside and will tell us where we stand. Some truths exhibited by Prof. Bishop (HAW Hamburg) and Prof. Ferguson (ETH) will certainly surprise us.

## DGfB General Meeting

**Thursday, 19 March, 11:45 AM – 12:45 PM, Audimax**

DGfB is structured as a non-profit association, and as such, formal voluntary administration plays an important role in our existence.

## Industry Presentation Corner

**Thursday, 19 March, 11:45 AM – 12:45 PM, room H0.09**

Industry partners will deliver short presentations to update participants on their latest products and developments. The session will be chaired by Prof. Nicholas Bishop.

## Young Investigator Award

**Thursday, 19 March, 1:15 PM – 2:30 PM, Audimax**

This session is an important component of our efforts to promote young talents. Six promising speakers were selected from 56 submissions to compete for the prestigious Young Investigator Award. The enthusiasm of the audience will play a key role in determining the winner.

## Quo-Vadis – Panel debate

**Thursday, 19 March, 1:15 PM – 2:30 PM, Audimax**

Three former TUHH graduates want to find the future direction of biomechanics. Prof. Duda (Charité, Berlin), Prof. Wimmer (Rush, Chicago), and Dr. Windolf (Bios Medical, Davos) also represent different life plans, which might inspire young scientists. Prof. Augat (BGU, Murnau) will moderate the discussion and ensure that no soft spot is left out.

## Presidential lecture

**Friday, 20 March, 9:55 AM – 10:25 AM, Audimax**

With this talk, the baton will be passed to Prof. Niehoff (German Sport University Cologne). In her presidential lecture titled "Biomechanik im Wandel: Bewegung. Mechanik. Biologie", she will elaborate on the evolution of our science from metals to cells.

# WORKSHOPS OVERVIEW

## **GAMMA workshop** (in German only)

**Wednesday, 18 March 2026, 09:00 AM – 13:00 PM**

**Location: Audimax**

*Chair: Harald Böhm*

### **Block 1: Regulatorische Anforderungen und klinische Ganganalyse**

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9:00 AM **Regulatorische Rahmenbedingungen in der klinischen Ganganalyse mit Fokus auf die Medizinprodukteverordnung (MDR)**  
*Msc Anja Buchberger, Bundesamt für Sicherheit im Gesundheitswesen Wien*  
Fokus: MDR-Anforderungen für klinisch genutzte Ganganalyse-Systeme (inkl. Software)

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9:40 AM **Prothesenregister Heidelberg: Real-World-Daten zur Versorgungsqualität**  
*Prof. Sebastian Wolf, Universität Heidelberg*  
Fokus: Versorgungsforschung & Registerdaten als Evidenzbasis für Zulassung & Nachweisführung

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10:00 AM **Wie viel Evidenz fordert die MDR – und wie kann klinische Praxis sie liefern? Diskussion**

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10:15 AM **Pause**

### **Block 2: Muskuloskelettale Simulation als Instrument zur Wirknachweisführung**

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10:45 AM **Muskuloskelettale Simulation zur Bewertung der Wirkung der Agilium Freestep Orthese auf die Belastung des medialen Kniegelenkkompartiments**  
*Dr. Christina Frese, Universität Stuttgart*  
Fokus: Einsatz von Modellen zur mechanisch-funktionellen Bewertung von Orthesen

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11:05 AM **Muskuloskelettale Modellierung in der Orthesen- und Exoskelettentwicklung: Funktionsnachweis ohne klinische Studie?**  
*Dr. Jörg Miehling, Universität Erlangen*  
Fokus: Individualisierte Simulationen, Beispielanwendungen, regulatorischer Stellenwert

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11:25 AM **Wirknachweis eines Exoskeletts bei verschiedenen Hebestrategien auf die Belastung des unteren Rückens.**  
*Dr. Thomas Schmalz, Ottobock Biomechanische Forschung Göttingen*  
Fokus: Einsatz von Motion-Capture über inverse Dynamik bis zur Kraftabschätzung durch ein Muskuloskelettales Modell

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11:45 AM **Wie realitätsnah müssen Modelle sein, um regulatorisch anerkannt zu werden? Diskussion**

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12:00 PM **GAMMA Mitgliederversammlung**

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13:00 PM **Ende des Workshops**

## Nachwuchsworkshop (in German only)

18 March 2026, 10:00 AM – 13:00 PM

Location: Ditze Hall

Chair: Stefanie Hölscher-Doht

10:00 AM Begrüßung

10:10 AM Mein erster Antrag: von der Idee zum Forschungsvorhaben.  
*Prof. Dr. Martin Jordan*

10:35 AM Zwischen Theorie und Praxis: Forschungsdaten im echten Alltag  
*M. Eng. Mareike Schonhoff*

11:00 AM Netzwerken leicht gemacht: Wie baue ich mir mein eigenes Netzwerk?  
*PD Dr. Andreas Seitz*

11:25 AM Kaffeepause zum Networking

11:45 AM Klinische Forschung – wozu das Ganze? Spannende Beispiele aus Orthopädie und Unfallchirurgie.  
*Prof. Dr. Sven Märdian*

12:10 PM Produktentwickler – was machen die eigentlich genau?  
*M.Sc. Lukas Wagner; Firma DePuy - Synthes*

12:35 PM Meet the Mentor  
*Prof. Dr. Hurschler*

13:00 PM Abschluss- Hinweise auf Stipendien der DGfB



# POSTER PRESENTATIONS OVERVIEW

## PS 1: Motion analysis

Wednesday, 18 March, 6:15 PM – 7:00 PM, Room H0.07

- 
- 1.1 146 – WIE BEEINFLUSST MECHANISCHE BELASTUNG DAS QUELLVERHALTEN DER BANDSCHEIBE? EINE IN-VITRO-STUDIE  
*Ann-Kathrin Greiner-Perth\**
- 
- 1.2 188 – EINFLUSS VON KRAFTTRAINING DER OBERSCHENKELMUSKULATUR AUF DIE KNIEGELENKSKINEMATIK UND -KINETIK BEIM GEHEN: EINE PILOTSTUDIE  
*Judith Osterloh\**
- 
- 1.3 264 – LONGITUDINALE ENTWICKLUNG VERSCHIEDENER GANGPARAMETER NACH SPRUNGGELENKSFRAKTUR: EINE FOLLOW-UP-ANALYSE VON 3 BIS 6 MONATEN POSTOPERATIV  
*Claudia Oestreich\**
- 
- 1.4 129 – BE REAL: PREDICTING TREADMILL BELT SPEED CHANGES IN WALKING  
*Sophie Fleischmann*
- 
- 1.5 154 – PILOTSTUDIE: ANALYSE INTRA- UND INTERINDIVIDUELLER EFFEKTE VON PLANTAR- UND KIEFERPROVOKATIONEN AUF SPATIO-TEMPORALE GANGPARAMETER  
*Antonia Wigger\**
- 
- 1.6 162 – VARIABILITY IN BIOMECHANICAL GAIT PARAMETERS OF A PERSON WITH A TRANSFEMORAL AMPUTATION – RESULTS OF A MULTICENTER STUDY  
*Eva Maria Pröbsting*
- 
- 1.7 249 – COMPARISON OF ON-SNOW KINEMATICS BETWEEN ABLE-BODIED AND PARALYMPIC CROSS-COUNTRY SKIERS – A CASE STUDY  
*Uwe G. Kersting*
- 
- 1.8 209 – TRETROLLERFAHREN ALS GELENKSCHONENDE ALTERNATIVE ZUM GEHEN UND LAUFEN? EIN VERGLEICH DER VERTIKALEN BODENREAKTIONSKRÄFTE  
*Lennart Rissiek*

- 1.9 221 – VERGLEICHENDE MESSUNG DES EINFLUSSES VERSCHIEDENER SÄTTEL AUF DIE LANDEPHASE BEIM SPRINGREITEN MIT INERTIALEN MESSEINHEITEN  
*Franziska C. Wagner*
- 
- 1.10 202 – SCALING AS A LIMITING FACTOR IN OPENSIM SIMULATION  
*Maximilian Schödlbauer*
- 
- 1.11 186 – VERGLEICH VON MARKERLOSEN UND MARKERBASIERTE DATEN EINER 3D - GANGANALYSE - ERHEBUNG VON NORMDATEN IM KLINISCHEN KONTEXT  
*Jonas Emmerling*
- 
- 1.12 187 – FEASIBILITY OF MARKERLESS MOTION CAPTURE (THEIA3D) FOR MONITORING ORTHOSIS OUTCOMES IN PEDIATRIC GAIT ANALYSIS  
*Zahra Salehi Tabar*
- 
- 1.13 PORTABLE GAIT-ASYMMETRY DETECTION USING LOW-COST HARDWARE AND MACHINE LEARNING  
*Victor Lange*

## PS 2: Clinical and translational biomechanics

Wednesday, 18 March, 6:15 PM – 7:00 PM, Room H0.09

- 
- 2.1 259 – ACCURACY OF A SIMPLIFIED METHOD FOR ASSESSING TRICEPS SURAE MUSCLE VOLUME IN PATIENTS AFTER FIBULA FREE FLAP SURGERY: A MRI CASE SERIES  
*Jonathan Kelley\**
- 
- 2.2 200 – A COMPARISON OF METHODS TO INVESTIGATE VIBRATION PERCEPTION THRESHOLDS AT THE FOOT  
*Claudio Zippenfennig*
- 
- 2.3 227 – DEVELOPMENT OF AN ADVANCED KNEE SIMULATOR FOR DYNAMIC MOTION: A FEASIBILITY STUDY  
*Gwendolin Prusa*

2.4 140 – MECHANISCHER WIDERSTAND ALS ECHTZEITINDIKATOR FÜR FEHLLAGEN? EINE STANDARDISIERTE ANALYSE DER PEDIKELSCHRAUBENPLATZIERUNG  
*Sascha Kurz*

2.5 189 – EVALUATION OF CONTACT MECHANICS IN CARTILAGE DEFECT REPAIR USING A NEW HYDROGEL MATRIX FOR AUTOLOGOUS CHONDROCYTE TRANSPLANTATION AND MINCED CARTILAGE IMPLANTATION  
*Parisa Pourostad*

2.6 248 – MODELLING LESION GROWTH AND ITS IMPACT ON FEMURS WITH METASTATIC BONE DISEASE USING CT BASED FINITE ELEMENT ANALYSIS  
*Abbas Rizvi*

### PS 3: Musculoskeletal system

Thursday, 19 March, 3:45 PM – 4:30 PM, Room H0.07

3.1 168 – INTEGRATING  $\mu$ CT-BASED GEOMETRY INTO BIOMECHANICAL TESTING OF BONE PROPERTIES IN THE RAT MODEL  
*Marina Komrakova\**

3.2 204 – IN VIVO BELASTUNG INDUZIERT ORTSSPEZIFISCHE, TEILWEISE REVERSIBLE GEWEBEANPASSUNG IN KAUDALEN WIRBELKÖRPERN  
*Cosima Erhard\**

3.3 111 – EXPLORING OPTIMAL BODY POSITIONING IN MTB GRAVITY SPORTS USING IMU DATA  
*Gerda Strutzenberger\**

3.4 170 – EVALUATING HUMAN ACTIVITY RECOGNITION ALGORITHMS FOR WEIGHT-BEARING DETECTION FROM SMART INSOLES  
*Sergio Catalano\**

3.5 223 – EINFLUSS NEUROMUSKULÄRER STIMULATION AUF THERMOGRAFISCHE VERÄNDERUNGEN DER RÜCKENMUSKULATUR WÄHREND LANGER SITZPHASEN  
*Antonia Lieshoff\**

3.6 155 – COMPARISON OF GAIT VARIATIONS DURING FORWARD, SIDEWAYS, AND BACKWARD MOVEMENT BETWEEN NEUROLOGICAL PATIENT GROUPS AND A HEALTHY CONTROL GROUP  
*Clint Hansen*

3.7 251 – MUSCLE EXTENSION ANALYSIS FOR SOFT WEARABLE SYSTEMS DESIGN  
*Nataliya Sadretdinova*

3.8 180 – REGIONAL SPATIAL ACTIVATION PATTERNS OF THE BICEPS FEMORIS LONG HEAD REMAIN CONSISTENT ACROSS JOINT ANGLES DURING ECCENTRIC KNEE FLEXION  
*Alexander Fassbender*

3.9 233 – BIOMECHANICAL ANALYSIS AND HYPERELASTIC MODELLING OF PORCINE GROWTH PLATES UNDER COMPRESSION  
*Andreas Wittek*

3.10 120 – WELTWEIT ERSTE SYNCHRONE IN VIVO BELASTUNGSMESSUNGEN AN HÜFTE UND KNIE  
*Philipp Damm*

3.11 141 – STANDARDISIERTE MATERIALCHARAKTERISIERUNG DES LUMBOPELVINEN SYSTEMS – METHODISCHER ANSATZ UND BIOMECHANISCHE EVALUATION  
*Sascha Kurz*

3.12 272 – EARLY-STAGE DEVELOPMENT OF A BIOFIDELIC FINITE ELEMENT MODEL OF THE PREGNANT ABDOMEN  
*Rahul Soni*

### PS 4: Soft Tissue Engineering and Biomechanics

Thursday, 19 March, 3:45 PM – 4:30 PM, Room H0.09

4.1 239 – COMPUTATIONAL FRAMEWORK FOR MECHANICAL ANALYSIS OF HIGHLY ALIGNED CHANNEL-LIKE COLLAGEN SCAFFOLDS IN CRITICAL-SIZE BONE DEFECTS  
*Nina Hinrichsen*

4.2 226 – BIOMECHANISCHE ANALYSE DER BAND- UND SEHNENSTRUKTUR DES KNIEGELENKS  
*Benjamin Fischer*

4.3 270 – ELECTROMECHANICAL COMPUTATIONAL MODEL OF THE HUMAN STOMACH  
*Maire Henke*

4.4 244 – LOKAL AUFGELÖSTE, PHANTOMKALIBRIERTE VBMD-BESTIMMUNG ENTLANG GEPLANTER SCHRAUBEN- UND BOHRTRAJEKTORIEN IN 3D SLICER  
*Robin Heilmann*

4.5 153 – MECHANISCHE UND TRIBOLOGISCHE CHARAKTERISIERUNG UNTERSCHIEDLICHER GLASLOTBESCHICHTUNGEN AUF BIOKERAMIKEN  
*Angelika Nisalke*

4.6 250 – THE EFFECT OF DIFFERENT SEMAGLUTIDE CONCENTRATIONS ON CHONDROCYTES AND OSTEOBLAST IN VITRO (UP TO 16 DAYS)  
*Victoria Horbert*

**PS 5: Orthopaedic Implants and Fracture Healing**  
**Friday, 20 March, 10:30 AM – 11:15 AM, Room H0.09**

5.1 229 – SINGLE VS. DOUBLE PLATING IN LOW TRANSVERSE SACRAL FRACTURES – A BIOMECHANICAL STUDY  
*Julia Rudek\**

5.2 172 – LOCKERUNGSERKENNUNG VON HÜFTENDOPROTHESEN-STIELEN MITTELS KÖRPERSCHALLMESSUNGEN AN MEHREREN IMPLANTAT-POSITIONEN  
*Franziska Geiger\**

5.3 224 – ADHESION ENHANCEMENT OF TITANIUM NANOTUBES ON Ti6AL4V: SCRATCH TEST EVALUATION  
*Adrian Buchholz\**

5.4 158 – OSTEOSYNTHESIS SCREW FAILURE PREDICTED BY PERI-IMPLANT BONE MORPHOLOGY AND LOAD ANGLE USING MACHINE-LEARNING MODELS  
*Andreas Reisinger\**

5.5 109 – BIOMECHANISCHE TESTUNG VON KABELKLAMMERIMPLANTATEN ZUR STABILISIERUNG DES VORDEREN BECKENRINGS IM ZWEIBEINSTANDVERSUCH  
*Justus Bremer\**

5.6 185 – GIBT ES SEITENSPEZIFISCHE UNTERSCHIEDE IN DER BELASTBARKEIT VON PEDIKELSCHRAUBEN? VERGLEICH DER KNOCHENDICHTE MIT BIOMECHANISCHEN TESTUNGEN  
*Florian Metzner*

5.7 241 – EXPERIMENTELLER AUFBAU ZUR QUASISTATISCHEN PRÜFUNG VON STERNUMFRAKTUREN MIT OSTEOSYNTHETISCHER VERSORGUNG  
*Lea Meißner*

5.8 238 – ÜBERWACHUNG DER KNOCHENHEILUNG MIT HILFE EINER SENSORENPLATTE (SMART IMPLANT) ÜBER EINEN ZEITRAUM VON ÜBER 11 JAHREN  
*Lea Meißner*

5.9 181 – ZEHN JAHRE EXPLANTATREGISTER FÜR ENDOPROTHESEN – NUTZEN, EVIDENZ UND PERSPEKTIVEN  
*Linda Stange*

5.10 240 – CT-BASIERTE BESTIMMUNG MINIMALER BOHRDURCHMESSER ENTLANG GEKRÜMMTER INTRAOSSÄRER TRAJEKTORIEN IM BECKEN  
*Finn Rohe*

5.11 205 – ROTATORISCHE STABILITÄT EINES BIORESORBIERBAREN BANDERSATZES UNTER KONSTANTER AXIALER BELASTUNG  
*Julietta Bandel*

5.12 242 – ANALYSIS OF BOUNDARY CONDITIONS ON THE DIAPHYSEAL FEMUR DURING BIOMECHANICAL TESTING  
*Levita Graciella Valeriant*

5.13 159 – VERSCHIEDENE VARUS-VALGUS-CONSTRAINED KTEP-SYSTEME IM VERGLEICH IHRER STABILITÄT BEI ERZWUNGENER VARUS-VALGUS-BEWEGUNG  
*Matthias Brensing*

5.14 171 – DEVELOPMENT AND MECHANICAL CHARACTERIZATION OF AN ADDITIVELY MANUFACTURED DENTAL IMPLANTS  
*Osman Akbas*

5.15 176 – INFLUENCE OF BONE DENSITY, CORTICAL THICKNESS, AND BODY WEIGHT ON PRIMARY STABILITY OF CEMENTLESS HIP STEMS: A FINITE ELEMENT-BASED PREDICTIVE MODEL  
*Jie Yang*

5.16 156 – DER EINFLUSS DES OSTEOTOMIEWINKELS BEI SCHRÄGER IBIAOSTEOTOMIE ZUR KORREKTUR VON VARUS/VALGUS-DEFORMITÄTEN  
*Martin Heilemann*

\* short oral presentation

## SOCIAL EVENTS

Important notice: Please make sure to always wear your congress badge. Access to the social events will only be granted to participants who are visibly wearing their congress badge.

### Welcome reception

**When:** Wednesday, 18 March, 6:15 PM – 7:45 PM

**Where:** Foyer of the TUUH

**Please wear your registration badge.**



### AMTI Rookie Night

**When:** Wednesday, 18 March, 8:30 PM – 11:00 PM

**Where:** Sky Lounge at the PHNX, Hannoversche Straße 88a, Hamburg

Travel to PHNX will take approximately 20 minutes.

**Capacity Notice:** The event has reached full capacity. Entry will therefore be limited to pre-registered attendees only.



### Gala dinner aboard of the MS Hanseatic boat

**When:** Thursday, 19 March, 7:30 PM – 10:30 PM

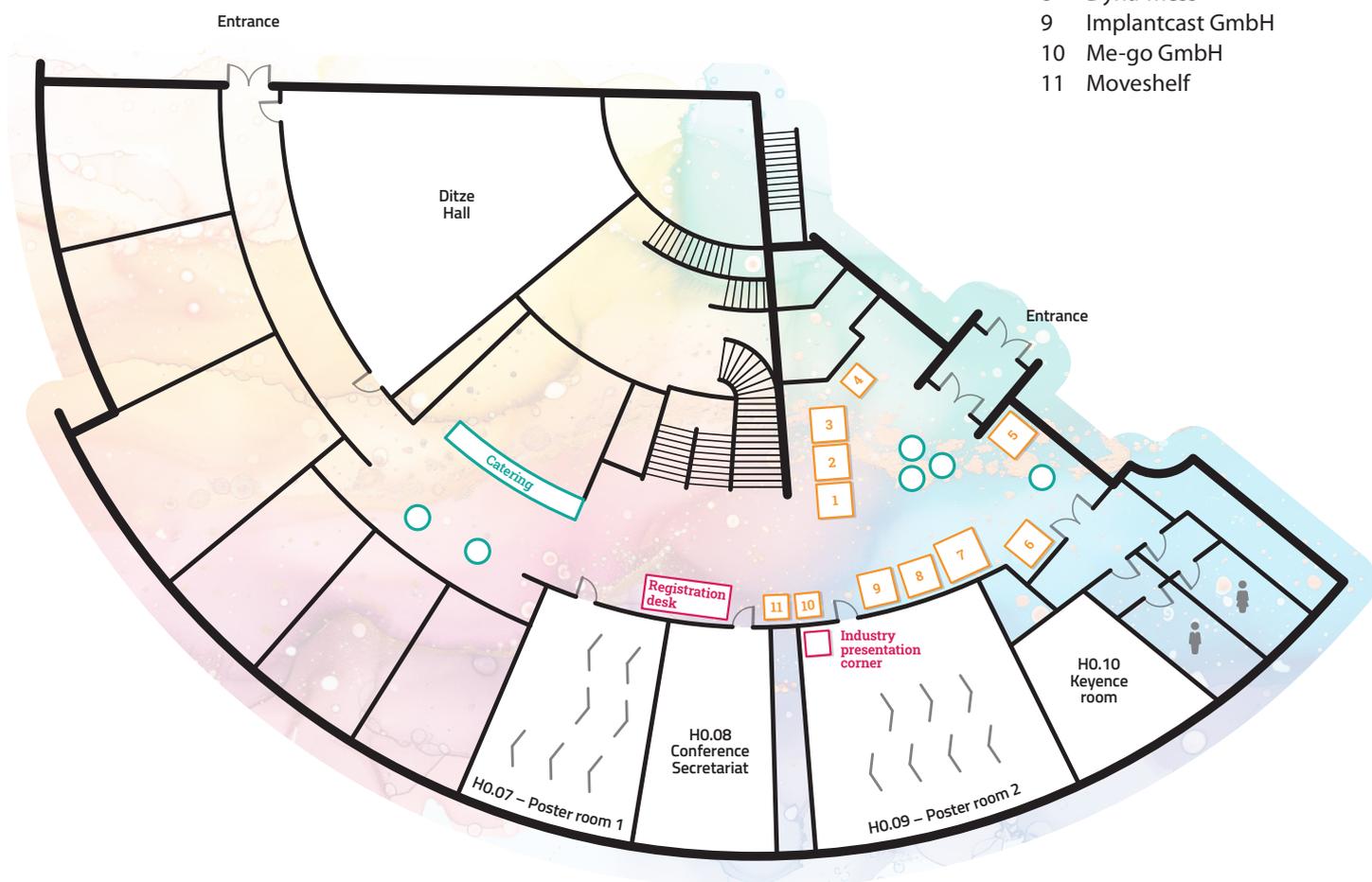
**Where:** Überseebrücken, St. Pauli Landungsbrücken, Brücke 7–10

**How to get there:** Travel to Landungsbrücken will take approximately 45 minutes. Please plan your journey accordingly and arrive by 7:30 PM. The boat will depart promptly at 8:00 PM. Unfortunately, we will not be able to delay departure for late arrivals.

**Capacity Notice:** The event has reached full capacity. Entry will therefore be limited to pre-registered attendees only.

# EXHIBITION PLAN

- 1 Delsys Europe
- 2 Beta Cae
- 3 Velamed
- 4 h/p/cosmos GmbH
- 5 XSENSOR
- 6 Captkis S.r.l.
- 7 prophysics AG
- 8 Dyna-mess
- 9 Implantcast GmbH
- 10 Me-go GmbH
- 11 Moveshelf



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# biomechanics

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Biomechanics (ISSN 2673-7078) is an international, peer-reviewed, open access journal covering all aspects of biomechanics, which can be described as the application of principles and methods of mechanics to the quantitative study of biological problems. Its research scope ranges from whole organisms to systems and organs (including blood, body fluids, organs, and bones) within the human body as well as animals and plants.

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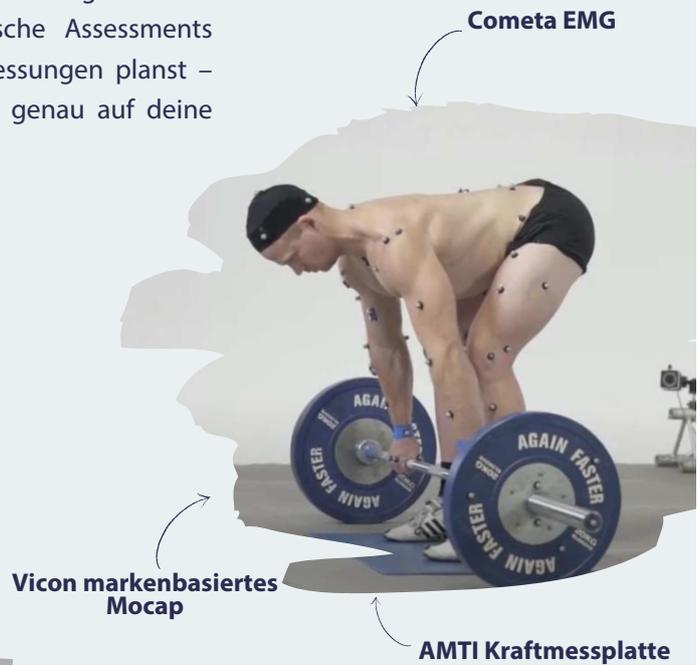


30 Jahre prophysics,

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Von einzelnen Komponenten bis hin zu vollständig integrierten Laborsystemen unterstützen wir dich von der ersten Beratung und Planung bis hin zur nahtlosen Umsetzung. Ob du biomechanische Forschung betreibst, klinische Assessments durchführst oder komplexe, multimodale Messungen planst – wir liefern maßgeschneiderte Lösungen, die genau auf deine Bedürfnisse zugeschnitten sind:

- Kraftmessplatten
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