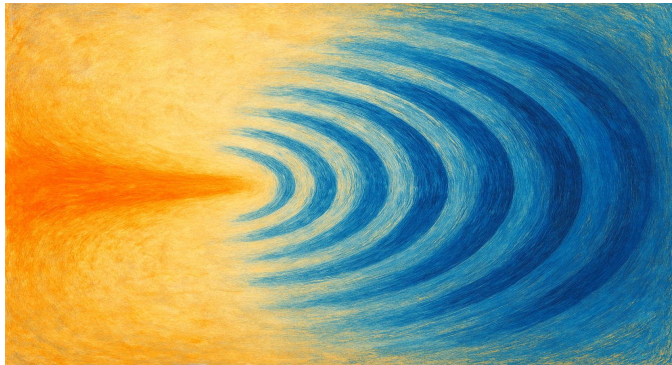# 13TH WINTER SYMPOSIUM
of the Human Motion Project

SOUNDING MOTION
Birth, Wearables and Motion

10 March 2026
09:00 - 16:00 CET hybrid

Venue:
University Hospital Munich Rechts der Isar Hospital (MRI)
Ismaninger Str. 22 - Auditorium B
81675 Munich
Germany

Register until February 27th, 2026
https://humanmotioninstitute.de/register

Contact: Prof. Dr. Martin Daumer
SLCMSR e.V. - The Human Motion Institute
TUM School of Computation, Information and Technology
Technische Universität München (TUM)
Email: daumer@slcmsr.org
Website: https://humanmotioninstitute.de

This symposium is dedicated to the memory of the exceptional scientist, physician, and physiologist **Prof. Dr. med. Jörn Rittweger** (*17.3.1962 - † 21.4.2025)
https://trauer.ga.de/traueranzeige/joern-rittweger/gedenkbaeume

PRELIMINARY PROGRAM
The organizer reserve the right for rearrangements

08:45   Registration & Coffee

09:00   Welcome
Martin Daumer, SLC e.V. - The Human Motion Institute, Trium Analysis Online, Technical University of Munich (TUM), GER

09:15   How Bohmian Mechanics both underpins and reveals the limits of our current understanding of matter and radiation scattering
Siddhant Das, postdoctoral researcher, Arnold Sommerfeld Center for Theoretical Physics, Ludwig-Maximilians-Universität München, GER

09:30   Towards CTG data hub
Simon Crequit, Department of Gynecology and Obstetrics, Intercommunal Hospital Center André Grégoire, FR

09:45   Prenatal prediction of adverse neonatal outcome utilizing machine learning methods on CTG and partogram data
Sophia Andres, Department of Obstetrics and Gynecology, University of Ulm, GER

10:00   Vaginal breech birth: learnings from 21 Years of retrospective data analysis (*tentative*)
Teresa Starrach, Department of Obstetrics and Gynecology, Perinatal Center Großhadern, LMU University Hospital, GER

10:15   Algorithms to predict fetal distress and short-term variation
Martin Daumer, **Christian Lederer Marcin Mider**, SLC e.V. - The Human Motion Institute, Trium Analysis Online, Technical University of Munich (TUM), GER

10:30   From tracking to transformation: Wearables, KI and the next generation of woman health
Geraldine Wunderlin, Department of Obstetrics and Gynecology, Perinatal Center Großhadern, LMU University Hospital,, GER

10:45   Panel Discussion: Obstetrics and Monitoring moderated by Sven Kehl, Head of Obstetrics and Perinatal Medicine, LMU University Hospital, GER

11:00   Coffee break

PRELIMINARY PROGRAM
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11:30   Deaths potentially averted by small changes in physical activity and sedentary time: an individual participant data meta-analysis of prospective cohort studies
Jacob Tarp, Oslo Research Centre for Physical Activity and Population Health (ORC-PAPH), Department of Sports Medicine, Norwegian School of Sport Sciences, NOR

11:45   Wearable sensors for exhaled breath analysis
Can Dincer, Professorship of Sensors and Wearables for Healthcare, TUM School of Computation, Information and Technology, Technical University of Munich (TUM), GER

12:00   Running biomechanics and exercise optimization across simulated gravity levels
Marcello Grassi, PhD student, School of Computation Information and Technology, Technical University of Munich (TUM), GER

12:15   The moon wall: a musculoskeletal model of horizontal running in lunar gravity
Eleonora Bolognese, Spaceship team (EAC), European Space Agency (ESA)

12:30   Lunch break, Exhibition & Networking, Poster, Discussion

13:15   Europe's Medical Device Regulation reform: heading in the right direction?
Anett Schönfelder, research associate, Medical Device Regulatory Science, Else-Kröner-Fresenius Center of Digital Health, Dresden University of Technology, GER

13:30   HEARTWISE* a chronic disease management platform
Oliver Hayden[1], **Martin Daumer**[2], Corporate Research Center for Translational Cancer Research, TranslaTUM, GER[1]; SLC e.V. - The Human Motion Institute, Trium Analysis Online, Technical University of Munich (TUM), GER[2]

13:45   Full-body gestures and movements in dyadic conversations in noisy environments
Lubos Hladek[12], **Bernhard U. Seeber**[1], Audio Information Processing, Technical University of Munich (TUM) [1], GER; Acoustics Research Institute, Austrian Academy of Sciences, AUT[2]

AI, QR, CACoM & others

14:00 Accelerating hospital documentation: practical benefits of combining AiLA, and AI solutions
Marc Heiderhoff, Founder & CEO of Arinlas GmbH, Head of the Institute for Hospital Information Management Münster (IKiM), VP Digital Business Models in Medicine, AHIME - Association of Health Information Management Executives, GER

14:15 Turning data into action: how digital assistance creates transparency and flow in the OR
Stefanie Grabow, surgical coordinator, Ludwig-Maximilians-Universität München, GER

14:30 Removing intercultural barriers to teaching and learning in the international university: enhancing interaction between chinese students and german professors
Karl Hughes, Lecturer for English, Englisch Coaching Programm, Language Center, Technical University of Munich (TUM), GER

14:45 Student Presentations of the TUM lecture "Clinical Applications of Computational Medicine" (CACoM)

From sedentary to success: moving towards daily activity with wearables
Nils Kreuder, Jule Brumma, Ignacio Hernández de la Calera, Hyebeen Lee, José Iván Espejo Paredero

Gestational age group — effects of FHR baseline threshold on Alarm rate
Jiayi Wang, Jinxuan Chang, Vanik Arakelyan, Brigitte Ernst, Weihao Xu

STV-based quality assessment for fetal heart rate Monitoring using FHR signals
Jiaqi Lin, Chenhao Guan, Jiajia Hu, Xiudong Zhang, Shilin Zhang

Foot-sole pressure sensor
My Linh Le, Francesco Orlandi, Isaiah Arias, Ahmed Abdeldayem

Collecting and evaluating data from electronic stethoscopes to infer heart insufficiencies (in combination with wearables)
Michael Vogt, Eliška Klabíková, Bingnan Wang, Hang Yu, Lucía Anastasia Pérez Peribáñez

Ca. 15:45 Panel Discussion, Closing Remark

REGISTRATION

REGISTRATION FEE

The symposium fee* (VAT included) is as follow:

Industry	400€
Academic / Research	250€
PhD student	100€
Student	50€
TUM CACOM student	free
Interested patient and press	free
Speaker	free

*Symposium fee includes drinks & lunch

Pay through Stripe or PayPal. Please go to our website: https://humanmotioninstitute.de/register

SLCMSR e.V. - The Human Motion Institute is a non-profit association under § 52 Abs. 2 of German Law and a tax-exempt non-profit association under § 5 Abs. 1 (corporate income tax regulation)

If you require assistance regarding your payment, please contact our support team at info@humanmotioninstitute.de

Please register on our website:
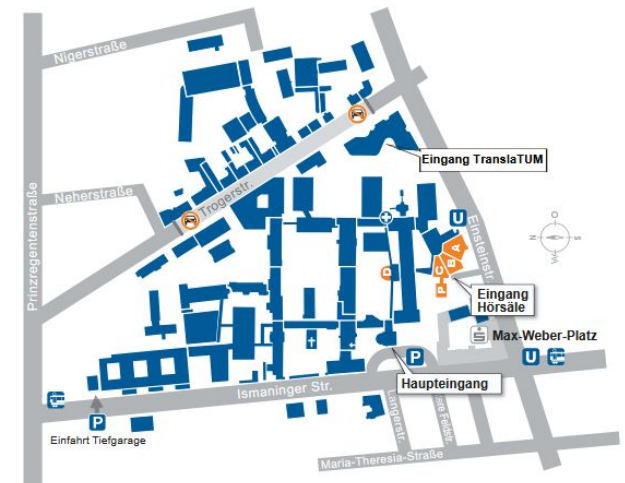**https://humanmotioninstitute.de/register**

General Data Protection Regulation
The applicant agrees that SLCMSR electronically saves and processes personal data necessary for the registration process and upcoming symposia (§28 GDPR)

**REGISTRATION CLOSING DATE
FRIDAY FEBRUARY 27, 2026**

GENERAL INFORMATION

Map

SCIENTIFIC ADVISORY BOARD
Martin Daumer, SLC-Human Motion Institute, Trium Analysis GmbH, TUM School of Computation, Information and Technology, Technical University of Munich (TUM). GER

Ylva Hellsten, University of Copenhagen, Integrative Physiology, Dept. of Nutrition, Exercise and Sport, DK

Sven Kehl, Head of Clinical Obstetrics and Perinatal Medicine Großhadern, LMU University Hospital, GER

The organizer will request the Certification of Medical Education points (CME-credits) from the Bavarian Medical Association (BLÄK)

+++ Please note, that the event will be recorded and we will make the recording available to registered participants afterwards in order to receive CMEs +++

BayernWLAN or eduroam
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