https://novel.de/events/esm-2024/

https://novel.de/news/

# ESM 2024

We are delighted that there will be another ESM this year from July 20th to 22nd. It will take place in Grassau, Bavaria close to Munich and Salzburg. The ESM 2024 links very well with the ISBS Congress in Salzburg ending on July 19th.

Since 1989, the ESM Meetings have gained a legendary reputation as a scientific event that brings together young researchers and world-renowned scientists.

During scientific lectures and discussions, the state of research in the field of pressure and force loading on the human body and in animals is explained.

The ESM 2024 will showcase the current state of knowledge and enable planning for future research.

### Program

#### Saturday, 20.7.24

• 18.00h Welcome Reception and Dinner

## Sunday, 21.7.24

•	08.30h	Registration
---	--------	--------------

- 09.00 Welcome back
- 09.10-10.10 Session 1 (4 Presentations, 10+5 minutes each)

Kelly Jeans	The Contralateral Foot in Children with Clubfoot: Is it Normal?
Kelly Jeans	Effect of the Abduction Bracing on the Contralateral Foot in Patients with Unilateral Clubfoot Deformity: A Longitudinal Study
Luke R. Lotsis / Roshna Wunderlich	Investigating the role of intrinsic foot muscles in modulating foot shape on banked surfaces
Angelina Garkisch	Influence of flexor superficialis tendon transfer on fingers grip force

- 10.10-10.55 coffee break (45 Minutes)
  - 10.55-12:20 Session 2 (4 Presentations, 10+5 minutes each + 1 Award presentation)

Jessi Martin-Liddy	Medial Longitudinal Arch Stability Assessment Utilizing Step-to-Step Pressure Trajectory Variability During Midstance
Claudia Giacomozzi, Francesco Martelli	Wearables and metrics in gait analysis: with respect to gait cycle identification, is it still worth to measure plantar force?
Henriette Gaertner, Renzo Pozzo	Coordination between pedal and finger forces during piano playing in classical passage with respect to the quality of sound

Heiko Freudenberg	The use of pressure distribution data to develop AI models for posture detection
ESM-Award Finalist: Isabel Sacco	Effects of foot-ankle exercises on foot-ankle kinematics, plantarpressure, and gait kinetics in people with diabetic neuropathy: Secondary outcomes from a randomized controlled trial

• 12:20-12:55 Session 3 (Poster session, 6 Posters, 3+2 minutes each)

Lucoveis M, Isabel C.N. Sacco	Customized silicone toes orthosis for redistribution of plantar pressure in people with diabetic neuropathy and calluses: case studies report
Anne Crowell	Using pressure distribution measurements to assess equine saddle three performance: a case study
Ludwig Meiss, Christer Busch	Stepit, a plantar flexion device
Markus A. Wimmer, L. Cedin, C. Knowlton	Musical Feedback from pressure-sensing insoles for asymmetric gait retraining
Matthias Thelen, Uwe Kersting	Loading during run-ups of halfpipe snowboarding: a pilot study
Ferreira J., Isabel C.N. Sacco	Web-based foot-ankle exercises can modify DPN-related outcomes and plantar pressure during gait in diabetic neuropathy: results of a randomized controlled trial

- 12.55-13.55 lunch (60 Minutes)
- 13.55-15.20 Session 4 (4 Presentations, 10+5 minutes each + 1 Award presentation)

Lisa Vossen	Associating scalar and multidimensional plantar pressure parameters for assessing offloading
Jaap van Netten	Cumulative plantar tissue stress and its association with plantar foot ulceration in people with diabetes
Angelika Guthoff, Alexander T. Matthiessen, Meiss	Efficacy of stepit foot pedal exercises for increase of venous return – a pilot study
Alexander T. Matthiessen, Meiss, Angelika Guthoff	Bekämpfung venöser Stase ohne und mit Messung der Vorfußkraft – was ist besser?
ESM-Award Finalist: Kevin Bill	Individualized Technique Feedback for Instant Technique Improvements and Knee Abduction Moment Reductions – A New Approach for 'Sidestepping' ACL Injuries

- 15.20-15.50 coffee break (30 Minutes)
- 15.50-17.15 Session 5 (4 Presentations, 10+5 minutes each + 1 Award presentation)

D - ( Fischer	Contribution of fingers, thumb and palm to the grip force in diabetic patients and non-diabetic controls
Thomas Kernozek	Ground reaction forces during landings in a game-like volleyball scenario

Sylva P., Isabel C.N. Sacco	Two different masking approaches to assess plantar loadings of individuals with diabetic neuropathy during gait: a secondary analysis of a randomized controlled trial
Anna Tribo Crespo	Ultrasound-detected ankle tenosynovitis is associated with foot function disorders: a cross-sectional study
ESM-Award Finalist: Jaap van Netten	New biomechanical models for cumulative plantar tissue stress assessment in people with diabetes at high risk of foot ulceration

• 17.15-17.45 DIALECT Session (4 Presentations, 5 minutes, 10 minutes discussion at the end)

Isabella Gigante	Exploring unknowns in footwear design for individuals with diabetes at moderate to high risk of ulceration: a knowledge gap analysis
Kamran Shakir	From Healing to Remission: offloading in the Transition Phase to Permanent Footwear for People with Diabetes
Hadi Sarlak	Developing Novel Data-driven Off-the-Shelf Footwear for People with Diabetes
Onur Okcu	A state of the art biomechanically applicable shear force measuring system

• 19.00 Dinner/Barbeque

# Monday, 22.7.24

- 09.00 Welcome, Housekeeping
- 09.15-10.30 Session 6 (5 Presentations, 10+5 minutes each)

Barbalace M, Claudia Giacomozzi	Wearables and metrics to quantify gait asymmetry: may RMS help?
Marion Mühldorfer-Fodor, Kristina Rohmfeld	Hand's load distribution in carpal tunnel syndrome
Robin Queen, Samantha Weiss, Kevin Ford, Joe Hart	Sex-Specific Differences in Peak Force and Impulse Symmetry during Running and Walking Following ACLR
Markus Wimmer	Foot Mechanics in plantar fasciitis: paradoxical hallux dorsiflexion and lateral pressure shift
Howard Hillstrom	The reliability and utility of measuring first ray mobility

- 10.30-11.15 coffee break (45 Minutes)
- 11.15-12:30 Session 7 (3 Presentations, 10+5 minutes each)

Eva Putz	Automation of an assessment of patients following hip arthroplasty
Victoria Rebholz, Robin Queen	Patients returning to sport after anterior cruciate ligament reconstruction have greater push-off force asymmetry during hop testing
Bas Van Hooren; Lars van Rengs, Kenneth Meijer	Predicting musculoskeletal loading at common running injury locations using machine learning and instrumented insoles

• 12.30-13.30 lunch (60 Minutes)

- 13.30-15.00 Session 8: / Seminar / Discussion I (90 Minutes, 4 SC members moderate)
- 15.00-15.45 coffee break (45 Minutes)
- 15.50-17.00 Session 9: Seminar / Discussion II and closing remarks (70 Minutes, 4 SC members moderate)
- 19.00 Piano concert

# About Pianist

• 20.00 Banquet and Award presentations

### Tuesday, 23.7.24

For the 23rd we plan an outdoor day all together. The novel crew will join us for the day.

It is planned to take a cable car to the Kampenwand mountain lodge (<u>Kampenwandseilbahn</u>) and hike a bit there, have lunch enjoy the view and relax.

It will not be exhausting or extreme. A pair of good sport shoes, a cap and a rain jacket (just in case) would be recommended.

For those who want more exercise they can walk up or down the mountain on good trails.

Please let us know latest at your arrival day if you want to join us so that we can arrange for tickets.