

10:30 - 11:30 Karl Kalina (TU Dresden)

- *A perspective on material modeling with physics-augmented neural networks*

11:30 - 12:30 Franz Dammaß (TU Dresden)

- *Invariant-based physics-augmented neural networks and applications to hybrid modelling of fracture*

12:30 - 13:30 **LUNCH @ Mensa**

13:30 - 13:55 Hagen Holthusen

- *On Neural Representation of Convex and Non-Convex Dissipation Potentials*

13:55 - 14:20 Maximilian Ries

- *Molecular insights into the mechanics of adhesive joints*

14:20 - 14:45 Denisa Martonová

- *Discovering the constitutive behaviour of soft biological tissues*

14:45 - 15:10 Sebastian Pfaller

- *Multiscale simulations of fracture: What can we learn from such investigations?*

15:10 - 15:45 **COFFEE BREAK**

15:45 - 16:10 Simon Wiesheier

- *Data-adaptive spline-based viscoelasticity*

16:10 - 16:35 Malte Rolf

- *Design, experimental characterization, and model discovery of structured soft-tissue-mimetic hydrogels*

16:35 - 17:00 Miguel A. Moreno-Mateos

- *Cutting Mechanics of Soft Solids*

17:00 - 17:25 Moritz Flaschel

- *Material Fingerprinting: Model discovery without optimization*

SOFTFRAC / DISCOVER Symposium

Seminar room 0.85, Martensstraße 5-7

Monday, January 19, 2026, 10:30 - 17:25

Institute of Applied Mechanics, Erlangen

Organizers: Miguel A. Moreno-Mateos (miguel.moreno@fau.de);
Moritz Flaschel (moritz.flaschel@fau.de).

Sign up in: <https://terminplaner.dfn.de/SPvLvPgvrIkqPO81>



SoftFrac

