



3rd international Symposium on the **Fundamentals of Fracture**

March 26-31 2023, DPG Spring Meeting, Dresden, Germany

Fracture is a complex multi-scale, multi-physics phenomenon and a fundamental, mechanism-based understanding is needed to disentangle the underlying, interacting processes. With this topical session we aim at connecting specialists from the fields of solid-state physics, materials science, continuum mechanics, statistical physics and mathematics to cover theory, numerical modeling and experiments related to:

- Initiation of fracture and early stage of crack propagation
- Environment-assisted cracking
- Grain boundary fracture and interface cracks
- Crack propagation in heterogeneous media
- Interplay of fracture and plasticity
- Fracture of nanostructured and disordered materials
- Mesoscale, micromechanical and local approaches to fracture
- Linking experimental and computational fracture analysis
- Machine learning aided fracture analysis

Invited Speakers include:

- Yinan Cui, Tsinghua University, China
- Thomas Edwards, EMPA, Switzerland
- Jay Fineberg, The Hebrew University of Jerusalem, Israel
- Marc Fivel, University of Grenoble, France
- Lorenz Romaner, Montan Universität Leoben, Austria

The symposium will be held as part of the DPG Spring Meeting of the Condensed Matter Section of the German Physical Society. Dresden, a former UNESCO World Heritage Site, is known as the Jewel Box, because of its baroque and rococo city center and is one of the most visited cities in Germany.

Abstracts are due until 1 December 2022, 23:59 Central European Time

The submission of contributions is possible online at <https://s.gwdg.de/IlkFx5>
(choose MM: Metals & Materials Physics Division and later Topic: Fundamentals of Fracture)
The early bird conference fees is 270 Euro.

For more information see: <https://skm23.dpg-tagungen.de/> and <https://s.gwdg.de/Mt9IxC>