

LOCATION

Hotel Riesengebirge

Marktplatz 14
90616 Neuhof an der Zenn



For the transfer to and from Neuhof an der Zenn there is a rented coach for registered participants:

Departure on **October 14, 2021 at 8:00 a.m.**
at Cauerstraße, Erlangen

Departure on **October 15, 2021 at 5:00 p.m.**
at Hotel Riesengebirge, Neuhof an der Zenn

CONTACT

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Announcement:

November 26, 2021
1st (virtual) FRASCAL Symposium, online
Online registration:



[www.frascal.research.fau.eu/
events-2/1st-frascal-virtual-
symposium/](http://www.frascal.research.fau.eu/events-2/1st-frascal-virtual-symposium/)

Research Training Group
GRK 2423

Fracture across Scales

6th RTG SEMINAR

October 14-15, 2021

Hotel Riesengebirge
Neuhof an der Zenn



PROGRAMME

Thursday, October 14

09:00 - 09:30 CHECK IN & COFFEE

09:30 - 09:40 **Welcome & Introduction**
Prof. Paul Steinmann (spokesperson)

09:40 - 10:10 **Nosaibeh Esfandiary (P7)**
Crack morphology and adhesion properties of hierarchical structures

10:10 - 10:40 **Paras Kumar (P8)**
Computational modeling of fracture in finite deformation setting via variational approaches

10:40 - 11:00 COFFEE BREAK

11:00 - 11:30 **Jonas Ritter (P5)**
High strain rate compression of porous brittle snow structures

11:30 - 12:30 **CVs and experiences of FRASCAL PAs**
Julia Mergheim, Paul Steinmann

12:30 - 14:00 LUNCH BREAK

14:00 - 14:30 **Dhananjay Phansalkar (P9)**
Dynamic simulation of a phase-field fracture with the Newmark method

14:30 - 15:00 **Paul Steinmann**
Peer review - from the perspective of the editor, the reviewer and the author

15:15 - 18:00 HIKING; 18:30 DINNER

PROGRAMME

Friday, October 15

08:00 - 09:00 BREAKFAST

09:10 - 09:40 **Julian Konrad (P3)**
Interfaces & nano-particles in epoxy resins

09:40 - 10:10 **Tarakeshwar Lakshmipathy (P2)**
Influence of crack tip radius on fracture behavior

10:10 - 10:40 **Christof Bauer (P6)**
Adaptive switching between FE and MD according to the current load level

10:40 - 11:00 COFFEE BREAK

11:00 - 11:20 **Wuyang Zhao (P6)**
A concurrent MD-FE coupling method towards fracture simulations of amorphous glassy polymers

11:20 - 11:40 **CVs and experiences of FRASCAL PAs**
Ana-Sunčana Smith

11:40 - 12:10 **Daniel Koehn (P13)**
Deformation bands and fragmentation processes in faults across scales in Earth Sciences

12:10 - 13:40 LUNCH BREAK

13:40 - 14:10 **Sukhminder Singh (P11)**
Stochastic material optimization for enhancing delamination resistance of composites

14:10 - 14:40 **Tobias Müller (P1)**
How to determine the minimum energy pathway for crack propagation with correct boundary conditions

14:40 - 15:10 **Christian Wick (P12)**
Towards understanding mechanochemistry in epoxy resins - Part II

15:10 - 15:30 COFFEE BREAK

15:30 - 15:50 **Ina Schmidt (P10)**
Bone fracture healing within continuum bone remodeling

15:50 - 16:10 **Samaneh Esfandiary (P7)**
Spectral signatures of fault tolerant neural architectures

16:10 - 16:30 **Stefan Hiemer (P5)**
Exploiting machine learning for the prediction of failure in microstructurally disordered materials

16:30 - 16:40 OUTLOOK & CLOSING
