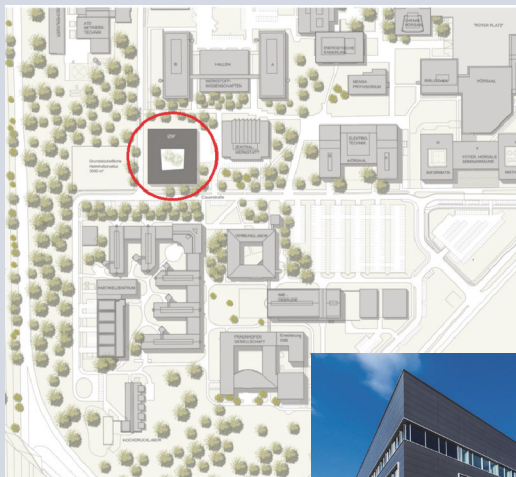


LOCATION

IZNF (Interdisciplinary Center for Nanostructured Films)

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Friedrich-Alexander-Universität
Erlangen-Nürnberg

Research Training Group
GRK 2423

Fracture across Scales

7th FRASCAL Seminar

19 December 2022

IZNF (Interdisciplinary Center for
Nanostructured Films)
Erlangen



FRASCAL

GRK 2423

PROGRAMME

8:50 – 9:00 Welcome

Paul Steinmann

9:00 – 9:20 Marie Laurien (P10)

*Nonlocal degrading interfaces in
continuum-kinematics-inspired peridynamics*

9:20 – 9:40 Christian Greff (P7)

*Failure in hierarchically structured 3D fuse
and beam networks*

9:40 – 10:00 Anna Titlbach (P10)

*A micromorphic approach for bone density
adaption*

10:00 – 10:20 COFFEE BREAK

10:20 – 10:40 Christian Ritterhoff (P1)

*Accelerating QM-based atomistic crack tip
calculations*

10:40 – 11:00 Lennart Igel (P11)

*A conditional stochastic gradient method for
fracture*

11:00 – 11:20 Ruaridh Smith (P13)

*Homogenising fracture networks from out-
crop and investigating scale relationships*

PROGRAMME

11:20 – 12:40 Q&A SESSION

Exercise for the DFG review

12:40 – 13:40 LUNCH BREAK

13:40 – 14:00 Bakul Mathur (P13)

*Modelling of fragmentation and fracturing
processes in deformation bands*

14:00 – 14:20 Joscha Seutter (P14)

*Existence of quasi-static crack evolution
for atomistic systems*

14:20 – 14:40 Angel Santarossa (P4)

*Crack front segmentation in mixed-mode
I+III hydraulic fractures*

**14:40 End of the seminar followed by a joint
Christmas walk**

