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9th FRASCAL SEMINAR

May 13th 2024

IZNF Seminar Room 00.156
Cauerstraße 3 | 91058 Erlangen
www.frascal.fau.eu

PROGRAMME

09:00 – 09:10 **Welcome & Introduction**
Michael Stingl

09:10 – 09:40 **Christian Greff (P7)**
Controlling damage localization through hierarchical microstructure

09:45 – 10:15 **Marie Laurien (P10)**
Damage in continuum-kinematics-inspired peridynamics

10:20 – 10:50 **Lennart Igel (P11)**
Stochastic optimization with high dimensional uncertainties with application to fracture control

10:50 – 11:05 **Break**

11:05 – 11:35 **Christian Ritterhoff (P1)**
Fracture of polar perovskite oxides

11:40 – 12:10 **Joscha Seutter (P14)**
Atomistic-to-continuum convergence for quasi-static crack growth

12:15 – 12:45 **Bakul Mathur (P13)**
Discrete element modeling of deformation bands

12:45 – 13:45 **Break**

13:45 – 14:15 **Angel Santarossa (aP4)**
Mixed-mode fracture in soft hydrogels

14:20 – 14:50 **Lukas Laubert (aP6)**
Relating the chemical structure and mechanical properties of epoxy

14:55 – 15:25 **Ruaridh Smith (aP13)**
Fracture distribution variation in Northern Bavaria – towards large-scale geothermal fracture models

15:25 – 15:40 **Break**

15:40 – 16:10 **György Hantal, Sampanna Pahi & Bariscan Arican (P12)**
Multiscale study of curing and fracture in an epoxy polymer

16:10– 16:30 **Closing discussion**