Contact

FRASCAL's (Post-)Doctoral Researchers



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Research Training Group GRK 2423

Fracture across Scales

FRASCAL **GRK 2423**





www.frascal.fau.eu

FRASCAL's Scientific Objectives



Mechanistic insights into environmentally-assisted fracture

P2 P4 P1 P3 Bernd Erik Dirk Thorsten Bitzek Zahn Pöschel Mever Computational General Material Theoretical Chemistry Multiscale Simulation Chemistry Properties Fragmentation Chemistry at the Atomistics of Fracture in Crack-Heterogeneity in Large Scale Crack Tip Polymer **DEM** Simulations Interactions Composites: Nano to Meso **P5 P7 P6 P8** Michael Sebastian Paolo Julia Zaiser Pfaller Moretti Meraheim Materials Simulation Applied Mechanics Materials Simulation Applied Mechanics Compressive Fracture in Collective Fracture in Failure in Thermoplastics: Phenomena in Polymer Porous Materials Discrete-to-Failure at Complex Composites: Interfaces Meso to Macro Continuum **P10 P9** P11 Siarid Paul Michael Ana-Sunčana Levendecker Stingl Smith Steinmann Mathematical **Theoretical Physics** Applied Dynamics Applied Mechanics Optimization Quantum-to-Adaptive Dynamic Configurational Fracture Control

The qualification programme and the research programme are strongly inter-coordinated and form the core of GRK 2423 FRASCAL. This enables the goal-oriented scientific gualification of the doctoral researchers with short times to their degree and ensures close interactions between all involved institutions of the RTG



Continuum Model of Thermoset Fracture



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Fracture Simulation

Fracture/

by Material Optimization



Surface Mechanics



Principal Advisors





Qualification Programme

