3rd workshop on Chinese-German cooperation project:

Multiscale tests, simulation, optimization and 3D printing of UHPFRC materials and structures

18. September 2024, **09:00** AM - **11:30** AM, **IC 6/90** Ruhr-Universität Bochum

09:00 — **Intelligent identification of micro components and defects in composites based on deep learning and active contour modeling of X-ray CT Images**

Qiwei Qian - Wuhan University

09:20 — **Early Damage Assessment in Concrete Structures: A multi-scale simulation and machine learning approac**

Dr.-Ing. Ba Trung Cao - Ruhr University Bochum

09:40 — **A Multi-field Coupled Cohesive Damage Phase-Field Method for Complicated Hydraulic Fracturing in Quasi-Brittle Materials**

Xiaoyan Li - Wuhan University

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10:20 — **Steel fiber reinforced concrete for tunnel lining**

Dr. Zhen Liu - Tongji University/Ruhr University Bochum

10:40 — **Simulations of shear failure in concrete beams reinforced with WFRP stirrups considering interface and material anisotropy**

Dr. Xin Zhang - Zhejiang University

11:00 — **Computational modeling for shotcrete in NATM tunneling**

Rodolfo Williams - Ruhr University Bochum

Guests are welcome