

## **MS7: Modelling and simulation of damage and fracture induced by repeated contacts**

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This minisymposium aims at bringing together experts in modelling techniques and computational methods for the physical understanding and simulation of damage and fracture phenomena in materials and components induced by repeated contacts. Perspective authors are invited to contribute on the following topics:

- Modelling and simulation of damage and fracture induced by repeated contacts;
- Numerical methods for damage mechanics in the presence of repeated loadings;
- Numerical methods for fatigue crack growth;
- Modelling and simulation of fretting fatigue damage;
- Modelling and simulation of crack closure effects;
- Modelling and simulation of fracture and contact mechanics problems at material interfaces;
- Multi-scale numerical modelling in tribologic fatigue (fretting fatigue, rolling contact fatigue, influence of the microstructure, hardness, residual stresses or heterogeneities);
- Rolling contact fatigue;
- Damage caused by oscillatory normal contact;
- Modelling of plastic and/or frictional shakedown problems;
- Fracture and contact problems in finite elasticity.