Timetable

Monday, 6th February 2023 - Afternoon

9.10–12.30	**Registration**	
12.30–13.30	**Welcome snack**	
13.30–13.45	**WELCOME ADDRESS**	
13.45–14.00	**Zhao D.**	Cohesive Failure Incorporated in the Phase-field Approach by the Framework of Representative Crack Element
14.00–14.15	**Schöller L.**	Crack propagation phase-field modeling considering for multi-crack order parameters and mechanical jump conditions
14.15–14.30	**Fajardo Lacave A.**	A phase-field model for the multiscale analysis of fracture in short glass fiber reinforced polymers
14.30–14.45	**Vicentini F.**	Phase-field modeling of brittle fracture in heterogeneous bars
14.45–15.00	**Levy M.**	Crack nucleation in 1D heterogeneous bar: h- and p-FE approximation of a phase field model
15.00–15.30	**Coffee Break**	
15.30–15.45	**Ruan H.**	A thermo-mechanical phase-field fracture model: application to hot cracking simulations in additive manufacturing
15.45–16.00	**Bharech S.**	Evolution of microstructure and mechanical properties of porous materials during selective sintering: a 3D-multilayer phase-field approach
16.00-16.15	**Oyedeji T.**	Variational quantitative phase-field modeling of non-isothermal sintering process
16.15-16.30	**Marino M.**	Phase-field modelling of skeletal muscle neotissue formation in bioprinted scaffolds
16.30-16.45	**Wolf J.**	Wetting of structured surfaces modeled with a phase field approach
16.45-17.15	**Coffee Break**	
17.15–17.30	**Ferreira A.**	A directional energy split for phase-field modeling of brittle fracture
17.30–17.45	**Ziaei-Rad V.**	Orthogonal decomposition of anisotropic constitutive models for the phase field approach to fracture
17.45-18.00	**Sondershaus R.**	Modeling fractures in ice shelves using the phase field approach
18.00-18.15	**Storm J.**	Regularised fracture models based on discrete representative crack elements
18.15–18.30	**Rohracker M.**	A comparative assessment of different adaptive spatial refinement strategies in phase-field fracture simulations of brittle materials for the single edge notch tension test
18.30–18.45	**Jadhav D.**	Investigation of different forms of fracture using a spatially adaptive phase-field model
18.45–19.30	**GAMM AG MEETING**	
19.30–23.00	**Banquet (Dozenten Foyer - ETH Main Building)**	

Tuesday, 7th February 2023 - Morning

8.30–8.45	**Müller W.**	Modeling spinodal decomposition in lead containing solders by phase field theory - A review after 25 years
8.45–9.00	**Oudich H.**	Coupling mechanics with spinodal decomposition phenomena
9.00–9.15	**Chen W.**	Phase-field cohesive modeling of chemo-mechanical fracture in polycrystalline cathode particles of lithium-ion batteries
9.15–9.30	**Daubner S.**	Multiphase-field modeling of polycrystalline battery materials
9.30–9.45	**Voigt A.**	Possible advantages of a de Gennes-Cahn-Hilliard energy
9.45–10.15	**Coffee Break**	
10.15–10.30	**Kochmann D.**	Domain pattern statistics in tetragonal ferroelectric ceramics from high-resolution finite-temperature phase field simulations
10.30–10.45	**Guin L.**	A phase-field model for ferroelectrics with nonlinear kinetics and electro-mechanical couplings
10.45–11.00	**Fan L.**	A phase-field model for polycrystalline ferroelectricity with phase-coexistence
11.00–11.15	**Yang Y.**	Hysteresis tailoring of Fe-Ni permalloy by laser additive manufacturing: an investigation via multiphysics-multiscale phase-field simulations
11.15–11.30	**Bai Y.**	Phase-field study of the chemo-mechanical interplay in hydrogen-based iron oxide reduction for green steel making
11.30–12.00	**Coffee Break**	
12.00–12.15	**Schneider T.**	Phase-field modeling of subsurface fatigue crack initiation and growth in gear failure mode tooth flank fracture
12.15–12.30	**Heinzmann J.**	A cycle-jump methodology for the phase-field approach to fatigue fracture
12.30–12.45	**Kalina M.**	Phase-field modelling of fatigue fracture in anisotropic aluminium sheets
12.45–13.00	**Yan S.**	Modeling complex cyclic loading situations using the phase field method
18.45–19.30	**LUNCH (Alumni Pavilion)**	

Tuesday, 7^{th} February 2023 - Afternoon

14.00–14.15	**Damass F.**	Phase-field modelling of rate-dependent brittle-to-ductile fracture mode transitions
14.15–14.30	**Marengo A.**	A phase-field formulation of orthotropic ductile fracture with application to paperboard materials
14.30–14.45	**Sharma P.**	Numerical modelling of crack propagation in viscoelastic material at constant deformation
14.45–15.00	**You T.**	Poroelastic coupling with diffused fracture in phase-field models
15.00–15.30	**Coffee Break**	
15.30–15.45	**Manav**	Phase-field fracture modeling using deep learning
15.45-16.00	**Ritukesh B.**	A Quasi-Newton method for phase-field fracture model using positive definite element stiffness matrices
16.00-16.15	**Luo C.**	An accelerated staggered scheme for phase-field models based on the fixed-stress concept
16.15-16.30	**Reder M.**	Modelling of multi-phase particulate flow based on the phase-field method
16.30–16.45	**von Oertzen V.**	Bridging spatial and temporal scales in phase-field modeling of phase-transforming solids via unequally and nonlinearly weighted averaging operators
16.45–17.15	**Coffee Break**	
17.15–17.30	**Heider Y.**	Modeling of soil freezing and ice-lens growth using two-phase-field models embedded in non-isothermal poromechanics
17.30–17.45	**Menzel A.**	Phase-field crystal models of active crystal-like structures
17.45-18.00	**Prahs A.**	Classical crystal plasticity theory in the context of multiphase-field method and jump conditions
18.00–18.15	**Salvalaglio M.**	Microscopically-informed phase field modeling of crystals
18.15–18.30	**CLOSING REMARKS**	