GAMM2025

Tuesday 8 April 2025

S06.1: Material modelling with metals: S06.1.01 - Room 1.27 (08:30 - 10:30)

-Conveners: Stanisław Stupkiewicz

time	[id] title	presenter
08:30	[139] A novel algorithm for crystal plasticity based on an augmented Lagrangian formulation	NIEHÜSER, Alexander
08:50	[140] Analysis and comparison of interior-point methods for rate-independent single-crystal plasticity	STEINMETZ, Felix
09:10	[141] Numerical Investigation and Validation of a Riveted Connection with LPBF AlSi10Mg Components based on a Thermomechanical Coupled Chaboche-GTN Approach	RICHTER, Lukas
09:30	[142] A novel procedure for identification of material parameters in advanced creep-fatigue constitutive model based on artificial neural networks	JAHNKE, Alexander
09:50	[143] Hybrid data-driven and physics-informed regularized learning of cyclic plasticity with neural networks	HILDEBRAND, Stefan
10:10	[144] On Unifying Tensor and Matrix Approaches in Material Modeling	SCHLEBUSCH, Rainer

S06.1: Material modelling with metals: S06.1.02 - Room 1.27 (16:30 - 18:30)

-Conveners: Björn Kiefer; Stanisław Stupkiewicz

time	[id] title	presenter
16:30	[145] Stress partitioning in thermoelastoplastic materials	LALOVIĆ, Nikola
16:50	[146] Different aspects of modelling propagative instabilities in aluminum	MUCHA, Marzena
17:10	[147] On The Blow-Up Solutions In Nonlinear Elasticity Theory	GAWINECKI, Jerzy
17:30	[148] Smoothed Particle Hydrodynamics Modeling of Solid-state Deposition Process Friction Surfacing	ELBOSSILY, Ahmed

Wednesday 9 April 2025

S06.1: Material modelling with metals: S06.1.03 - Room 1.27 (08:30 - 10:10)

-Conveners: Björn Kiefer

time	[id] title	presenter
08:30	[149] 1D model of twin branching in shape memory alloys accounting for the energy dissipation effects	STUPKIEWICZ, Stanisław
08:50	[150] Evaluating chemo-mechanical coupling in phase-field methods: Benchmarks and Insights	KANNENBERG, Thea
09:10	[151] Multiphase-Field Modeling of Microstructure Evolution during Solid-State Processing of Al Alloys	NANAYAKKARA, H.A.T. Vimukthi
09:30	[152] New insights into grain boundary kinetics by phase-field crystal modeling	PUNKE, Maik
09:50	[153] Numerical Modelling of Deformation-Induced Martensitic Transformation in Additively Manufactured 316L Stainless Steel under Cryogenic Conditions	MAASCH, Philipp