GAMM2025

Thursday 10 April 2025

S27: Modern Teaching and Didactics in Mathematics and Mechanic: S27.01 - Room 0.21 (08:30 - 10:30)

-Conveners: Thorsten Bartel; Jaan-Willem Simon

time	[id] title	presenter
08:30	[332] Room for Improvement – A Blended Learning Concept with Teachers as Tutors and a Digital Exercise Type for Mechanical Equations	SATTLER, Moritz
09:10	[333] Addressing Common Learning Obstacles in Mechanics through Automated STACK Assignments: An Experience Report	ZWIERS, Ulrich
09:30	[335] A concept for STACK-based individual electronic assignments in third semester engineering mechanics	STRACKELJAN, Cornelius
09:50	[336] Digital tutorials and examination tools for Structural Analysis – a case study	BIRK, Carolin
10:10	[337] “Digital Engineering Mechanics” – implementation, opportunities and challenges	LAMMEN, Henning

S27: Modern Teaching and Didactics in Mathematics and Mechanic: S27.02 - Room 0.21 (14:00 - 16:00)

-Conveners: Thorsten Bartel; Jaan-Willem Simon

time	[id] title	presenter
14:00	[338] GAMEchanics: the open-source Mechanics-themed physical and virtual Escape Room	VÖLLMECKE, Christina
14:40	[340] Enhancing Chemical Engineering Education: Constructive Alignment and Augmented Reality in Experimental Fluid Mechanics	KAUFHOLD, Nils
15:00	[342] On possibilities and challenges of GPT-assisted learning environments	HARNISCH, Marius
15:20	[343] Innovative Fluid Mechanics Education through Augmented Reality and Interactive Learning	BEHR, Alexander S.
15:40	[344] Programming-enhanced mechanics - an innovative teaching approach for AI Engineering Education	WESTPHAL, Hanna

S27: Modern Teaching and Didactics in Mathematics and Mechanic: S27.03 - Room 0.21 (16:30 - 18:30)

-Conveners: Thorsten Bartel; Christina Völlmecke

time	[id] title	presenter
16:30	[345] Mechanics in teaching - theoretically sound basis and application-oriented fascination for engineering students	KUHL, Detlef
17:10	[346] Didactic comments on some of the most fundamental mathematical concepts used in teaching university-level mathematics courses	GUNESCH, Roland
17:30	[347] How to activate and engage students in the basic mechanics lecture. – A case study	SIMON, Jaan-Willem
17:50	[348] Self-Assessment to improve mechanical design understanding	ROTH, Timo

Friday 11 April 2025

S27: Modern Teaching and Didactics in Mathematics and Mechanic: S27.04 - Room 0.21 (08:30 - 10:30)

-Conveners: Jaan-Willem Simon; Christina Völlmecke

time	[id] title	presenter
08:30	[350] Platform for structured self-directed learning in fluid mechanics	FISCHER, Michael-David
09:10	[351] On methods to motivate students to self-organized learning and to enable them to acquire future skills	BARTEL, Thorsten
09:30	[352] Bring your own smartphone: Student activation in mechanics using the sandwich principle and collective smartphone experiments	KURZEJA, Patrick
09:50	[353] Mathematical Modelling in Action: CAMMP’s Educational Activities	BATA, Katharina