



Workshop at the Chair of Structural Mechanics

Wave propagation analysis and metamaterials

Time: Wednesday, 6. November 2019

Venue: PB - B 014

Time	Name	Topic of the presentation
Chair: Prof. Chuanzeng Zhang, Prof. M. V. Golub		
13:30 – 13:55	Prof. E. V. Glushkov and Prof. N. V. Glushkova	Determination of effective parameters of composite materials using surface acoustic waves
13:55 – 14:20	Prof. M. V. Golub	Hybrid approach for simulation of wave propagation in layered phononic crystals with cracks, electrodes and surface-mounted transducers
14:20 – 14:45	Dr. O. V. Doroshenko	Theoretical and experimental studies of wave transmission through interfaces with distributions of cracks
14:45 – 15:10	Dr. S. I. Fomenko	Band gap manipulation in layered phononic crystals via electrodes and capacitors
15:10 – 15:35	Dr. A. N. Shpak	Peculiarities of guided wave excitation by a rectangular piezoelectric transducer situated nearby a delamination
15:35 – 16:00	Break	
Chair: Prof. E. V. Glushkov, Prof. Yan Gu		
16:00 – 16:25	Dr. Shurui Wen	Enhanced band-gap properties of an acoustic metamaterial beam with periodically variable cross-sections

16:25 – 16:50	Zhengyang Li, MSc.	Adaptive active control tuning of vibration and wave propagation in two-dimensional plates
16:50 – 17:15	Dr. Tianxue Ma	Topological edge and interface states in phoxonic crystal cavity chains
17:15 – 17:40	Elias Perras, MSc.	Sound insulation of periodically structured walls
17:40 – 18:05	Dr. Yanzheng Wang	The positive role of interfacial delamination in the wave blocking of periodically multilayered elastic plates
18:30 – 21:30	Discussions and joint dinner	

Chuanzeng Zhang

Prof. Dr.-Ing. habil. Dr. h.c. mult. Chuanzeng Zhang

Siegen, 4. November 2019