



Annual FerrMion Workshop 2025
Institute of Thermomechanics, Czech Acad Sci

Monday, December 8th

13:45 – 13:50 opening (H. Seiner)

13:50 – 14:20	G. Ceccio (ÚJF)	Preparation and characterization of Li-ion battery components using neutron and ion beam methods
14:20 – 14:45	C. Hervoches (ÚJF)	Stabilization of I-type $\text{Ni}_4\text{Nb}_2\text{O}_9$ Structure and Magnetic Properties in $\text{Ni}_4\text{Nb}_{1.8}\text{W}_{0.1}\text{Ti}_{0.1}\text{O}_9$
14:45 – 15:00	R. Mikšová (ÚJF)	Ion-beam implantations for ferroelastic materials

15:00 coffee

15:30 – 16:00	J. Kušnir (ÚT)	Thermo-elastic coupling in transient grating spectroscopy
16:00 – 16:25	K. Šalata (MFF)	Effect of oxygen on martensitic transformation in beta titanium alloys
16:25 – 16:50	J. Kozlík (MFF)	Omega in Ti-Mo alloys revisited: a new phase-field model

Tuesday, December 9th

09:45 – 10:15	P. Bednyakov (FzÚ)	Photoinduced formation of ferroelectric charged domain
10:15 – 10:45	D. Musienko (FzÚ)	Building the Material Base for Ferroic Functionalities
10:45 – 11:15	P. Jaroš (ÚT/FJFI)	Machine Learning Based Interatomic Potential for Martensitic NiTi

11:15 coffee

11:45 – 12:15	O. Molnárová (FzÚ)	LPBF of NiTiHf Shape Memory Alloys: Processing-Microstructure-Property Correlations
12:15 – 12:45	A. Školáková (FzÚ)	Effect of cold rolling strain on the microstructural evolution in equimolar MoNbTaTiZr refractory complex concentrated alloy

14:00 – 14:30	L. Kubíčková (ÚT)	Topology optimization for engineering applications
14:30 – 15:00	A. Moskovka (ÚT)	Finite element implementation of finite strain constitutive models formulated in the logarithmic strain space

15:00 coffee

15:30 – 15:55	L. Hlodák (FJFI)	Using arc melting for quasicrystal development and gradient microstructures
15:55 – 16:20	T. Raffort (FJFI)	Nanoindentation as a tool for the comparison of pseudoelastic properties of NiTi

16:20 closing

Project name: Ferroic multifunctionality
Project Reg. No.: CZ.02.01.01/00/22_008/0004591