

## **Active, Soft and Magnetic Matter**

Tuesday, 28 January 2025 | 14:00 House of Science, University of Latvia – Room ZM, 804 Online: via Zoom

## **Programme**

Chair: Dr. Jo	rge Coelho	
14.00-14.05	Opening.	
14.05–14.17	Jorge Coelho	Exploring Vortex-Vortex Correlations in Dry Active Matter
14.17–14.29	Bhagyashri Shinde	Defect formation in expanding ensemble of spinners
14.29–14.41	Andrejs Tatuļčenkovs	Orientational order of the hexagonal distribution of an ensemble of spinners
14.41–14.53	Ivars Drikis	Numerical simulation of chevron pattern formation
14.53-15.05	Roberts Treize	Macroscopic experiments of magnetic particle dynamics
15.05–15.17	Viesturs Šints	Life in microfluidics: our results and outlook
15.17–15.40	Coffee break, discussions.	
15.40–15.52	Oksana Petrichenko	Some physical-chemical characteristics of the magnetic electrospun materials based on polyacrylonitrile (PAN)
15.52–16.04	Māra Šmite	Explicit and fully automatic analysis of magnetotactic bacteria motion reveals the magnitude and length scaling of magnetic moments
16.04–16.16	Rūdolfs Livanovičs	Gyromagnetic effects in the dynamics of a levitating magnetic particle
16.16–16.28	Lāsma Puķina-Slava	Recent results on gravity stabilized magnetic micro- convection
16.28–16.40	Andris P. Stikuts	Engineering tunable fractional Shapiro steps in colloidal transport
16.40-16.52	Ethan To	Magneto-Optical Sensing of Superparamagnetic Iron Oxide Nanoparticles in Aqueous Solution
16.52-17.00	Closing Remarks, discussions.	