Workshop "Nonlinear evolutionary equations and applications"- Schedule

Time	Tuesday 06.09.2022	Wednesday 07.09.2022	Thursday 08.09.2022	Friday 09.09.2022
08:00 - 08:55	Registration			
08:55 - 09:00	Opening - Chair: Greta Marino			
09:00 - 10:00	**Li Chen**	**Ansgar Jüngel**	**Alexander Mielke**	**Manuel Friedrich**
	Rigorous Derivation of the Degenerate Parabolic-Elliptic Keller-Segel System from a Moderately Interacting Stochastic Particle System	Cross-diffusion systems with entropy structure	Convergence of a split-step scheme for gradient flows with a sum of two dual dissipation potentials	Nonlinear and linearized models in thermoviscoelasticity
10:00 - 11:00	Coffee break	Coffee break	Coffee break	Coffee break
11:00 - 11:30	**Anastasiia Hraivoronska**	**Annamaria Massimini**	**Stefanos Georgiadis**	**Kamal Khalil**
	Diffusive limit of random walks on tessellations via generalized gradient flows	Analysis of a Poisson-Nernst-Planck-Fermi model for ion transport in biological channels	Asymptotic derivation of multicomponent compressible flows with heat conduction and mass diffusion	Analysis of a spatio-temporal advection-diffusion model for human behaviors in a disaster situation
11:30	**Clément Cancès**	**André Schlichting**	**Jean Cauvin-Vila**	**Salem Nafiri**
	On a thermodynamically consistent (reduced) model for iron corrosion	Gradient structures and tilting	A Cross-Diffusion Cahn-Hilliard system: existence and numerics	Homogenization of weakly coupled thermoelastic wave model
12:00			**Julia Hauser**	**Umberto Guarnotta**
			A Convergent Finite Volume Method for a Kinetic Model for Interacting Species	On a non-homogeneous parabolic equation with singular and convective reaction
12:30 - 14:00	Lunch break	Lunch break	Lunch break	
14:00 - 14:30	**Alex Rossi**	**Chun Yin Lam**	**Sebastian Hensel**	
	Analysis of kinetic models for label switching and stochastic gradient descent	Variational convergence of exchange-driven growth model in hydrodynamic limit	Robustness of the relative entropy approach to interface evolution: Mean curvature flow with constant contact angle	
14:30 - 15:30	**Marie-Therese Wolfram**	**Daniel Matthes**	**Tim Laux**	
	Collective dynamics in the social and data sciences	Exponential equilibration in cross-diffusion systems with gradient flow structure	The large-data limit of the MBO scheme for data clustering	
15:30 - 16:00	Coffee break	Coffee break	Coffee break	
16:00 - 16:30	**Alexandra Holzinger**	**Patrik Knopf**	**Sebastian Throm**	
	Rigorous mean-field derivation of cross-diffusion models of SKT-type	Two-phase flows with bulk-surface interaction: A Navier–Stokes–Cahn–Hilliard model with dynamic boundary conditions	Self-similar long-time behaviour for 1d kinetic equations	
16:30 - 17:00	**Demou Luo**	**Georg Heinze**	**Jakob Fuchs**	
	Nonconstant steady states and pattern formation of generalized 1D cross-diffusion systems with prey-taxis	Nonlocal Cross-Interaction Systems on Graphs: Nonquadratic Finslerian Structure and Nonlinear Mobilities	Strong Convergence of the Thresholding Scheme for the Mean Curvature Flow of Mean Convex Sets	
20:00		Social dinner		