

Developmental Biology	Gene Networks	Immunobiology and infection	Mathematical Epidemiology	Mathematical Neuroscience	Population Dynamics, Ecology and Evolution	
Mathematical Oncology	Mathematical Physiology	Model Identification/ Estimation	Methods Development	Education	Other	
DKFZ (INF 280)		Mathematikon (INF 205)		BioQuant (INF 267)		
Tuesday, 20.09.2022				Room	Zoom	
Keynote 09:00-09:50	Benoît Perthame Structured equations in biology; relative entropy, Monge-Kantorovich distance			DKFZ auditorium + streaming in Mathematikon & Bioquant	Zoom	
Keynote 09:50-10:40	Heather Harrington Shape of data in biology					
10:40-11:00	Coffee Break (DKFZ/BioQuant/Mathematikon)					
MS 3 11:00-12:40	Single-cell dynamics and longitudinal landscapes in cancer drug resistance and clonal evolution – Part 2 Mohit Kumar Jolly & Yogesh Goyal			DKFZ auditorium	Zoom	
	Modeling the female reproductive system at different scales Romain Yvinec			DKFZ K1+K2	Zoom	
	Insights on collective migration using agent-based modeling William Duncan Martinson & Sara Bernardi			BioQuant SR41	Zoom	
	Stochastic biochemical reaction networks Wasiur KhudaBukhsh & Hye-Won Kang			BioQuant SR42	Zoom	
	Boolean networks and related modeling frameworks - Part II: The Role of Canalization Claus Kadelka			BioQuant SR43	Zoom	
	Multiscale mathematical models of infectious disease James Doran			Mathematikon Hörsaal	Zoom	
	Non-local models in mathematical biology Jose Antonio Carrillo & Zuzanna Szymańska			Mathematikon SR A	Zoom	
Quantitative investigation of the immune system’s functions: from molecules to organisms - Part 1 Hassan (Sam) Jamaledine & Kevin Thurley			Mathematikon SR B	Zoom		
12:40-14:30	(Mentoring) Lunch			Mensa		
MS 4 14:30-16:10	Single-cell dynamics and longitudinal landscapes in cancer drug resistance and clonal evolution – Part 2 Mohit Kumar Jolly & Yogesh Goyal			DKFZ auditorium	Zoom	
	Recent Progress and Open Frontiers in Turing’s Theory of Morphogenesis Andrew L Krause & Frits Veerman			DKFZ K1+K2	Zoom	
	Quantitative investigation of the immune system’s functions: from molecules to organisms - Part 2 Hassan (Sam) Jamaledine & Kevin Thurley			BioQuant SR41	Zoom	
	SMB Writing Groups: Showcasing the research of one group to highlight the role of writing groups in the development of early-career researchers Shelby M. Scott, Laura F. Strube, Joan Ponce & Jessica Crawshaw			BioQuant SR42	Zoom	
	Bistable genetic switches across time, space, and disciplines Ruben Perez-Carrasco & Pilar Guerrero			BioQuant SR43	Zoom	
	Disease Models: Modeling, Analysis, and Simulation Xi Huo, Rongsong Liu & Ryosuke Omori			Mathematikon Hörsaal	Zoom	
	Novel techniques for spatial analysis of biological data Joshua A Bull & Bernadette Stolz			Mathematikon SR A	Zoom	
Anisotropy and finite-size effects in the emergence of collective behaviour Maria Bruna & Markus Schmidtchen			Mathematikon SR B	Zoom		
16:10-16:30	Coffee Break (DKFZ/BioQuant/Mathematikon)					
DEI Panel 16:30-18:10	Panel Discussion: Equity of paths into mathematical biology			DKFZ auditorium	Zoom	
	Panel Discussion: Building inclusive graduate programs in mathematical biology					
Editors 18:10-19:00	Meeting with Editors			DKFZ Foyer (EG)		
Posters 19:00-20:30	Methods Development	Other	Model Identification	Gene Networks	DKFZ Foyer (EG)	
	Mathematical Epidemiology	Mathematical Physiology	Immunobiology and Infection	Mathematikon Foyer (UG)		