

Developmental Biology	Gene Networks	Immunobiology and infection	Mathematical Epidemiology	Mathematical Neuroscience	Population Dynamics, Ecology and Evolution
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Mathematical Oncology	Mathematical Physiology	Model Identification/Estimation	Methods Development	Education	Other
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DKFZ (INF 280)	Mathematikon (INF 205)	BioQuant (INF 267)
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Monday, 19.09.2022			Room	Zoom
Opening 09:00-09:50	Opening Ceremony		DKFZ auditorium + streaming in Mathematikon & Bioquant	
Keynote 09:50-10:40	Roeland Merks Cell-based modeling in cell and developmental biology: from individual cell behavior to collective pattern formation			Zoom
10:40-11:00	Coffee Break (DKFZ/BioQuant/Mathematikon)			
MS 1 11:00-12:40	Mathematical modelling in radiation oncology – an RRS/SMB minisymposium Heiko Enderling & Jan Schuemann		DKFZ auditorium	Zoom
	Investigating the dynamics of many - Mathematical modeling and parameter estimation for multi-cellular systems Frederik Graw, Franziska Matthäus, Jan Hasenauer & Lutz Brusch		BioQuant SR42	Zoom
	Boolean networks and related modeling frameworks – Part I: Model design and analysis Claus Kadelka		BioQuant SR43	Zoom
	Mathematical biology of signaling and metabolism at synapses Guadalupe C. Garcia, Mayte Bonilla Quintana & Padmini Rangamani		BioQuant SR44	Zoom
	Controlling epidemics: the interplay between models and public health policies Vicenzo Capasso & Alberto d'Onofrio		Mathematikon Hörsaal	Zoom
	Evolutionary dynamics in structured populations: modelling, analytics and numerics Silvia Cuadrado & Tommaso Lorenzi		Mathematikon SR A + B	Zoom
	Dynamics of blood flow in microcirculation Yaron Ben-amri, Helen Byrne & George William Atkinson		Mathematikon SR C	Zoom
12:40-14:30	Lunch		Mensa	
MS 2 14:30-16:10	Collective cell migration in cancer growth and spread: interacting dynamics at multiple spatial scales Dumitru Trucu & Raluca Eftimie		DKFZ auditorium	Zoom
	Multi-scale phenomena in biology: modelling and analysis Annalisa Iuorio & Cinzia Soresina		BioQuant SR41	Zoom
	Stochastic Modelling of Genetic and Biochemical Systems - Part I Abhyudai Singh & Ramon Grima		BioQuant SR43	Zoom
	Mathematics for cell migration under the influence of the microenvironment: from single cells to populations Anna Zhigun & Christina Surulescu		Mathematikon Hörsaal	Zoom
	Mathematical modeling of psychiatric disorders and addiction Lucas Böttcher, Tom Chou & Maria R. D'Orsogna		Mathematikon SR A+B	Zoom
	Pattern formation in developmental processes Franziska Matthäus & Tim Liebsch		Mathematikon SR C	Zoom
16:10-16:30	Coffee Break (DKFZ/BioQuant/Mathematikon)			
CT 1 16:30-18:10	Mathematical Oncology		DKFZ auditorium	Zoom
	Population Dynamics, Ecology and Evolution		BioQuant SR41	Zoom
	Population Dynamics, Ecology and Evolution		BioQuant SR42	Zoom
	Gene Networks		BioQuant SR43	Zoom
	Mathematical Neuroscience	Model Identification/Estimation	BioQuant SR44	Zoom
	Mathematical Epidemiology		Mathematikon Hörsaal	Zoom
	Methods Development		Mathematikon SR A+B	Zoom
Mathematical Physiology		Mathematikon SR C		Zoom
NSF 18:10-19:00	Funding opportunities for Mathematical Biology at the NSF and the NIH Zhilan Feng (NSF/DMS/Math Bio) Joseph Whitmeyer (NSF/SBE/SES) Han Nguyen (NIH/NIGMS)		DKFZ auditorium	Zoom
Posters 19:00-20:30	Mathematical Oncology		DKFZ Foyer (EG)	
	Population Dynamics, Ecology & Evolution	Developmental Biology	Mathematical Neuroscience	Mathematikon Foyer (UG)