

Program - TRR227 Retreat 2022-2

Venue: Das Schmöckwitz

Date	Time slot	Project	PI	Presenter	
19 Sept	10:15	Arrival			Welcome refreshments: Coffee & Cookies
	10:50 - 11:00	Opening			M. Weinelt
	Chair: 11:00 - 11:30	A02	v.Korff Schmising / Eisebitt	K. Yao	All-optical switching on the nanometer scale excited and probed with femtosecond extreme ultraviolet pulses
	G. Woltersdorf 11:30 - 12:00	A04	Sharma / Dewhurst	S. Shallcross	Valley control in 2D materials
	12:00 - 12:30	A01	Weinelt	M. Weinelt	Ultrafast manipulation of 4f moments – implications for all-optical switching
	12:30 - 14:00	Lunch			
	Chair: 14:00 - 14:30	A03	Pontius / Schüßler-Langeheine	C. Schüßler-Langeheine	Update on A03
	K. Franke 14:30 - 15:00	A05	Seifert / Kampfrath / Dörr	Y. Behovits	Terahertz Néel spin-orbit torque in Mn ₂ Au
	15:00 - 15:45	B02	Kampfrath / Woltersdorf / Schmidt	W. Hoppe / R. Rouzegar G. Schmidt	Ultrabroadband spin transport through MgO tunneling barriers: from GHz to THz Charge dynamics in spintronic THz emitters
	15:45 - 16:15	Coffee break			
	Chair: 16:15 - 17:00	Invited #1		B. Göbel (MLU) B. Pal (MPI Halle)	Non-collinear spin textures for spintronics Electrical switching of chiral kagome antiferromagnet Mn ₃ Sn
	W. Widdra				
	17:00 - 19:30	Poster session			
	19:30 - 21:00	Dinner			
	21:00 -	Get-together		Beer / wine	
20 Sept	Chair: 09:00 - 09:45	Invited #2		A. P. Balan (U Mainz)	Spin-orbit torque and topological spin structures in van der Waals Fe _x GeTe ₂
	T. Kampfrath 09:45 - 10:15	B08	Bolotin	K. Bolotin	Strain manipulation of (ultrafast) valley dynamics
	10:15 - 10:45	B05	Franke	K. Franke	Exploring single magnetic atoms and nanostructures on MoS ₂ /Au(111) for spin-dynamics studies
	10:45 - 11:15	Coffee break			
	Chair: 11:15 - 11:45	Mercator		P. Oppeneer	Ab initio developments for spintronics and ultrafast magnetism
	P. Brouwer 11:45 - 12:15	Mercator		M. Weißenhofer	A multiscale approach to spin-lattice dynamics
	12:15 - 13:30	Lunch			
	14:00 - 17:00	Outdoor activity	Cruise on ship "Spree-Prinzessin"	Route Müggelberge	
	Chair: 17:30 - 18:00	A06	Widdra	W. Widdra	Dichroic imaging of magnetic surfaces
	18:00 - 18:30	A07	Kuch	W. Kuch	Studying magnetization dynamics in AF/FM layered films by resonant soft-x-ray reflectivity
	R. Ernstorfer 18:30 - 19:00	B04	Henk / Mertig	J. Henk	Evolving evolve - recent results and progress
	19:00 - 19:30	B03	Brouwer	P. Brouwer	Finite-frequency spin conductance of a ferro-/ferrimagnetic-insulator normal-metal interface
	19:30 - 21:00	Dinner			
	21:00 -	Get-together		Beer / wine	

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21 Sept	Chair:	09:00 - 09:30	A10	Windsor / Ernstorfer / Bargheer	W. Windsor / M. Bargheer	Ultrafast diffraction for magnetism: the cases of FGT and bismuth iron garnet
	W. Kuch	09:30 - 10:00	B07	Ernstorfer / Gahl / Rettig	T. Pincelli	Low energy excitations of Fe_3GeTe_2 , a correlated 2D ferromagnet
		10:00 - 10:30	B01	Melnikov	A. Melnikov	THz spin wave dynamics in metallic multilayers
<i>10:30 - 11:30 Coffee break</i>						
Chair:	11:30 - 12:00	B06	Berakdar	J. Berakdar	Collective superconducting dynamics driven by spintronic THz emitters	
J. Henk	12:00 - 12:30	Mercator		O. Chubykalo-Fesenko	A route to minimally dissipative switching in magnets via THz phonon pumping	
<i>12:30 - 13:30 Lunch</i>						
Chair:	13:30 - 14:00	A08		U. Atxitia	Bridging atomistic spin dynamics methods and phenomenological magnetization dynamics models of two-sublattice magnets	
M. Weinelt	14:00 - 14:30	B10	Taylor / Woltersdorf / Parkin	J. Taylor	Beyond SOT- switching of noncollinear antiferromagnets: first steps towards studying ultrafast dynamics in Project B10	
	14:30 - 15:30	PI Meeting		all PIs	Agenda to be distributed	