Correlations and Topology in Moiré Materials

Monte Verità, Ascona, Switzerland, 27 – 30 July 2025

Monday 28 July 2025

8:45	Opening remarks
9:00	Mitali Banerjee - tbd
9:40	Marta Perego - Experimental detection of vortices in magic-angle graphene
11:00	Antoine Georges - Moiré systems
11:40	Johannes Hofmann - Charge neutrality phase diagram of twisted bilayer graphene from sign-free Monte Carlo simulations
14:00	Leni Bascones - Heavy Fermions and Cascades in Twisted Bilayer Graphene: Recent Results
14:40	Lorenzo Crippa - Dynamical correlations and order in magic-angle twisted bilayer graphene
16:00	Discussion session
18:00	Poster session

Tuesday 29 July 2025

8:45	Opening remarks		
9:00	Xiaodong Xu - tbd		
9:40	Valentin Crépel - Robust prediction of moiré material topology		
11:00	Abhay Pasupathy - tbd		

11:40	Bo Yang - Geometric excitations of topological quantum fluids in moire flat bands				
14:00	Sid Parameswaran - Theory and phenomenology of spiral orders and their doped descendants in TBG				
14:40	Yves Hon Kwan - Strongly-interacting topological phases in rhombohedral graphene/hBN superlattices				
15:00	Glenn Wagner - Fractional topological insulators in twisted MoTe2				
16:00	Ryan Lee - Imaging Quantum Textures in Magic Angle Graphene				
16:20	Yiwen Liu - Visualizing inter-valley coherent states in rhombohedral trilayer graphene				
16:40	Discussion session				
18:00	Poster session				

Wednesday 30 July 2025

9:00	Dima Efetov - tbd
9:40	Hryhoriy Polshyn - Quantum anomalous Hall states and isospin-polarized metals in twisted monolayer-bilayer graphene
10:00	Louk Rademaker - Two Heavy Metal Mysteries
11:00	Dan Mao - Low-energy Optical Sum-rules
11:40	Malte Rösner - Microscopic Many-Body Models for Correlated Moiré Materials from Multi-Tier Ab Initio Downfolding Approaches
14:00	Atac Imamoglu - tbd
14:40	Tomasz Smolenski - Optical control of correlated magnetism in moiré materials
15:15	The free shuttle to Locarno station will run from 3:15pm to 7pm (every 40 minutes).

FINAL SCHEDULE

	Sunday	Monday	Tuesday	Wednesday
7:30-8:45		Breakfast	Breakfast	Breakfast
8:45-9:00		Opening Remarks		
9:00-9.40		Banerjee	Xu	Efetov
9:40-10:00	9:40-10:00		Crepel	Polshyn
10:00-10:20		Coffee Break	Coffee Break	Rademaker
10:20-11:00				Coffee Break
11:00-11:40	0-11:40		Pasupathy	Mao
11:40-12:00		Hofmann	Yang	Rösner
12:00-14:00		Lunch	Lunch	Lunch
14:00-14:40		Bascones	Parameswaran	Imamoglu
14:40-15:00		Crippa	Kwan	Smolenski
15:00-15:20	The free shuttle	Coffee Break	Wagner	
15:20-16:00	from Locarno station will run		Coffee Break	The free shuttle
16:00-16:20	from 3pm to 7pm (every 40	Discussion	Lee	to Locarno station will run
16:20-16:40	minutes).		Liu	from 3:15pm to 7pm (every 40
16:40-17:00			Discussion	minutes).
17:00-18:00	Welcome Drinks			
18:00-19:00		Poster session	Poster session	
19:00-20:30	Dinner	Dinner	Dinner	