

Geometry-Driven Quantum Phenomena: Principles, Devices, & Applications Workshop

WEDNESDAY, OCTOBER 15, 2025

START	END	NAME	TITLE	LOCATION
8:15 AM	9:00 AM	COFFEE & LIGHT BREAKFAST		Foyer & Sanders Hall
Session Chair: Jeanie Lau				
9:00 AM	9:30 AM	Mahesh Neupane/Joe Qiu	Welcoming Remarks	Sanders Hall
		Deborah Henandez		
		Josh Goldberger		
		Lou DiMauro		
9:35 AM	10:15 AM	Suyang Xu *	Magnetic Cascade Photocurrents Regulated by Quantum Geometry	Sanders Hall
10:15 AM	10:30 AM	BREAK		Foyer & Sanders Hall
10:30 AM	11:10 AM	Reko Penttilä *	Effects of flat bands on superconductivity of modified Lieb lattices and superconducting junctions	Sanders Hall
11:15 AM	11:35 AM	Student Poster Session		Mount Rm 125
11:35 AM	12:30 PM	Poster session continues (Mount), LUNCH (Foyer)		Mount 125 & Foyer
Session Chair: Reko Penttilä				
12:30 PM	1:10 PM	Brian Skinner *	Chiral electron crystal phases induced by Berry curvature	Sanders Hall
1:15 PM	1:55 PM	Fan Zhang *	Geometric Deep Optical Sensing	Sanders Hall
2:00 PM	2:30 PM	SNACK		Foyer & Sanders Hall
2:35 PM	3:15 PM	Enrico Rossi *	Interplay of Quantum Geometry and Inhomogeneities in Superconductors	Sanders Hall
3:20 PM	4:00 PM	Mohit Randeria *	Rigorous Bounds on Superconducting Tc's and Quantum Geometry	Sanders Hall
4:00 PM	5:00 PM	Panel Discussion		Sanders Hall
		DINNER: Suggested Options in Visitor Packet		

* = 35 min talk, 5 min Q&A

THURSDAY, OCTOBER 16, 2025

START	END	NAME	TITLE	LOCATION
8:15 AM	9:00 AM	COFFEE & LIGHT BREAKFAST		Foyer & Sanders Hall
Session Chair: Fengnian Xia				
9:00 AM	9:40 AM	Andrei Bernevig *	Quantum Geometry Beyond Toy Models: An analytical solution to complicated superconductors	Sanders Hall
9:45 AM	10:25 AM	Marc Bockrath *	Quantum Geometry and Flat Band Superconductivity in Twisted Bilayer Graphene	Sanders Hall
10:30 AM	10:45 AM	BREAK		Foyer & Sanders Hall
10:45 AM	11:25 AM	Junyeong Ahn *	Towards chiral superconducting optics	Sanders Hall
11:25 AM	11:30 AM	Group Photo		
11:30 AM	11:50 AM	Student Poster Session		Mount Rm 125
11:50 AM	1:00 PM	Poster session continues (Mount), LUNCH (Foyer)		Mount 125 & Foyer
Session Chair: Brian Skinner				
1:00 PM	1:40 PM	Petr Stepanov *	Near-Field Microscopy in the Moiré Graphene Heterostructures	Sanders Hall
1:45 PM	2:25 PM	Joel Wang *	Superfluid Stiffness and Flat-Band Superconductivity in VdW Superconductors Probed by cQED	Sanders Hall
2:30 PM	3:00 PM	SNACK		Foyer & Sanders Hall
3:00 PM	3:40 PM	Jairo Velasco Jr. *	Imaging Quantum Scars in Electronic Graphene Billiards	Sanders Hall
3:45 PM	5:00 PM	Panel Discussion		Sanders Hall
7:00 PM	8:30 PM	DINNER (For invited guests)		Napa Kitchen & Bar

* = 35 min talk, 5 min Q&A

FRIDAY, OCTOBER 17, 2025

START	END	NAME	TITLE	LOCATION
8:15 AM	9:00 AM	COFFEE & LIGHT BREAKFAST		Foyer & Sanders Hall
Session Chair: Jairo Velasco Jr.				
9:00 AM	9:40 AM	Barry Bradlyn *	Quantum geometry, quantum information, and response functions	Sanders Hall
9:45 AM	10:25 AM	Abhishek Banerjee *	Dielectric response of Graphene Quantum Hall Insulator	Sanders Hall
10:25 AM	10:50 AM	BREAK		Foyer & Sanders Hall
10:50 AM	11:30 AM	Raquel Queiroz *	Quantum Geometry and the scales it imprints in electronic systems	Sanders Hall
11:30 AM	12:30 PM	Departure	BOX LUNCH	Foyer & Sanders Hall

* = 35 min talk, 5 min Q&A