

Focus Weeks Workshop on Quantum Information and Physics

All lectures in Wolfensohn Hall unless noted otherwise

Week #1 – August 19-23, 2024

(As of 08/21/24)

Time:	Monday, August 19	Tuesday, August 20	Wednesday, August 21	Thursday, August 22	Friday, August 23
7:45 am & 8:15 am	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)
8:00 – 8:55 am	Workshop Registration (Wolfensohn Hall)				
8:00 – 9:00 am	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)
8:55 – 9:00 am	Welcome Remarks (Wolfensohn Hall)				
9:00 – 10:30 am	“Entanglement and Phases of Matter” Frank Verstraete	"Chaos and Gravity" Douglas Stanford	“Entanglement-Based Probes of Topological Phases” Michael Levin	"The Page Curve from Gravity" Geoff Penington	“Physics of Topological Codes” Meng Cheng
10:30 – 11:30 am	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)
11:30 am – 12:30 pm	Discussion Sessions Red Group: Rubenstein Commons Meeting Room 5 Blue Group: Dilworth Room (Simons Hall) Green Group: Bloomberg Lecture Hall				
12:30 – 1:30 pm	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)
2:00 – 3:30 pm	“Unitary Complexity and Cryptography” Henry Yuen	“Quantum Algorithms” Ewin Tang	“Experiments in Quantum Information” Mikhail Lukin	“Pseudorandom Unitaries and Compressed Purifications” Fermi Ma	"Quantum Information Theory" Norbert Schuch
3:30 – 4:30 pm	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)
4:30 – 6:00 pm	Discussion Sessions Red Group: Rubenstein Commons Meeting Room 5 Blue Group: Dilworth Room (Simons Hall) Green Group: Bloomberg Lecture Hall				
6:00 – 7:00 pm	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)
7:00 & 7:30 pm	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)

Focus Weeks Workshop on Quantum Information and Physics

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Week #2 – August 26-30, 2024

(As of 08/20/24)

Time:	Monday, August 26	Tuesday, August 27	Wednesday, August 28	Thursday, August 29	Friday, August 30
7:45 am & 8:15 am	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)	Tiger Transit shuttle pickup - Nassau Inn (Drop off at Fuld Hall)
8:00 – 8:55 am	Workshop Registration (Wolfensohn Hall)				
8:00 – 9:00 am	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)	Morning Coffee/Light Breakfast (Simons Hall)
8:55 – 9:00 am	Welcome Remarks (Wolfensohn Hall)				
9:00 – 10:30 am	“Tensor Networks” David Perez-Garcia	“Topological Phases and Quantum Information” Ashvin Vishwanath	“Shallow Quantum Circuits” Robert Huang	“Incompressibility of Random Walks on Unitary Group” Jeongwan Haah	“Quantum Simulation” Andrew Childs
10:30 – 11:30 am	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)	Coffee Break (Simons Hall)
11:30 am – 12:30 pm	Discussion Sessions Red Group: Rubenstein Commons Meeting Room 5 Blue Group: Dilworth Room Green Group: Bloomberg Lecture Hall				
12:30 – 1:30 pm	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)	Lunch (Simons Hall)
2:00 – 3:30 pm	“Holography and Quantum Information” Daniel Harlow	Informal Discussions	Informal Discussions	“Complexity and Gravity” Tamara Kohler	Informal Discussions
3:30 – 4:30 pm	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)	Afternoon Tea (Simons Hall)
4:30 – 6:00 pm	Discussion Sessions Red, Blue, Green	Informal Discussions		Discussion Sessions Red, Blue, Green	Informal Discussions
6:00 – 7:00 pm	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)	Dinner (Simons Hall)
7:00 & 7:30 pm	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)	Return Tiger Transit shuttle - Nassau Inn (Pick up at Fuld Hall)