# **QERNEL Launch Event**

# **April 20, 2025**

## Bar-Ilan University, Engineering building 1102 [map]

Registration: <a href="https://qernel.org/events">https://qernel.org/events</a>
Contact info: events@qernel.org

### **Program**

9:00-9:30	Refreshments and Registration		
9:30-9:40	Greetings		
9:40-10:20	Invited Lecture - Sabine Tornow		
10:20-11:40	Contributed talks WP1 (1-4)		
11:40-11:50	Group photo		
11:50-13:10	Lunch (Rosmarin restaurant [map])		
13:10-13:40	Unveiling QERNEL		
13:40-15:00	Contributed talks WP2 (5-8)		
15:05-15:20	Coffee break		
15:20-17:00	Contributed talks WP3 (9-13)		

#### **Invited Lecture**

Sabine Tornow, Bundeswehr University

"Quantum Trajectories and First Hitting Times on a Quantum Computer"

### **Contributed talks**

	Speaker		Affiliation	Title
1	Ziv	Chen	Technion	Quantum Machine Learning for Predicting and Controlling Fluid Flows
2	Noam	Rimock	Tel Aviv	Generalized type-2 fusion of graph states
3	Ohad	Lev	Bar-Ilan	Atypical Design Schemes for Lean Quantum- Classical Hybrid Algorithms.
4	Amit	Te'eni	Bar-Ilan	Oracle problems as communication tasks and optimization of quantum algorithms
5	Liam	Bernheimer	Tel Aviv	Determinant- and derivative-free quantum  Monte Carlo within the stochastic representation of wavefunctions
6	Jader P.	dos Santos	Jerusalem	SPAM error mitigation for dynamic circuits
7	Nikita	Leppenen	Weizmann	Interplay between collective and local dissipation in quantum open systems
8	Shuanger	Ma	Bar-Ilan	Loss of resonances for noisy quantum recurrence with restarts
9	Einat	Buznach Ahituv	Bar-Ilan	Unveiling a hidden percolation transition in monitored Clifford circuits
10	Raz	Firanko	Technion	Structure and complexity of steady states of local quantum channels
11	David	Shnaiderov	Bar-Ilan	Optimal strategies for characterizing crosstalk in superconducting quantum computers
12	Khen	Cohen	Tel Aviv	Ergodic MBL on a boson sampler
13	Daniel	Azses	Tel Aviv	Nonunitary gates using measurements only