PUBLICATIONS

· *Simulating a measurement-induced phase transition for trapped ion,* (accepted in PRA) arxiv: 2106.03769 (2021) https://arxiv.org/abs/2106.03769
· *Accessing different topological classes and types of Majorana edge states in coupled superconducting platforms using perturbations*, arXiv:2003.08299 (2020) link
· *Photo-induced SU(3) topological material of spinless fermions*, Phys. Rev. B 95, 165425 (2017). link
· *Boosted one-dimensional superfluids on a lattice*, Annals of Physics, Vol. 384, 71-84 (2017) link

ONGOING PROJECTS

· *Simulating entanglement transition in open quantum systems with trapped-ion devices,* collaboration with K. Rajibul Islam (U.Waterloo) and Roger Melko (U.Waterloo).
· *Complexity of sampling bosonic random walkers on a lattice in the presence of weak interactions*, collaboration with Los Alamos National Lab (US), Oxford University (UK) and University of New Mexico (US). (To be submitted soon)
· *Efficient simulation of robust observables in noisy quantum systems*, collaboration with Macquarie University (Australia) and University of New Mexico (US).
· *Disorder-free localization and error propagation in the Kitaev honeycomb model*, collaboration with University of Sydney (Australia) and Oxford University (UK).