## Sayonee Ray

## Invited talks and seminars

- Sep, 2021 University of Toronto and Vector Institute, Quantum Computing seminar series and panel discussion organized by Royal Bank of Canada.

  –invited talk and panel speaker on Near-term quantum devices: Goals and expectations
- Apr, 2021 University of Arizona, Quantum Information and Science seminar series.

  –invited talk on Many-body physics, quantum effects and its simulation complexity.
- Feb, 2021 **Portland Quantum Computing Meetup**, online seminar series.

  –invited talk on *Simulation complexity in noisy quantum systems*.
- Dec, 2020 **Sandia National labs**, Livermore, California.

  -invited talk on *Many-body physics*, quantum effects and its simulation complexity.
- Sept, 2020 **AgnostiQ**, Toronto, Canada.

  –invited talk on Many-body physics, quantum effects and its simulation complexity.
- Aug, 2020 Los Alamos National Laboratory, New Mexico.

  —invited talk on Many-body physics and its simulation complexity.
- March, 2020 Oak Ridge National Laboratory, Tennessee.

  —invited talk on Robust simulation of observables and localization in many-body systems.
  - Feb, 2020 University of Sherbrooke, Sherbrooke, Canada.

    —invited talk on Accessing different topological classes and types of Majorana fermions in coupled superconducting platforms.
  - Jan, 2020 Brookhaven National Laboratory, New York.

    -invited talk on Robust simulation of observables and localization in many-body systems.
  - Dec, 2019 Lawrence Livermore National Laboratory, California.

    -invited talk on Robust simulation of observables and localization in many-body systems.
  - April, 2019 Los Alamos National Laboratory, New Mexico.

    —invited talk on Disorder-free localization in the Kitaev honeycomb model.
  - Oct, 2018 Centre for Quantum Information and Control, UNM, Albuquerque.

    -seminar on Operator spreading in exactly solvable frustrated spin systems in two dimension.
  - Aug, 2018 **Department of Physics, Boston University**, Boston.

     invited talk on *Boosted one dimensional superfluids on a lattice*.
  - Oct, 2017 **Centre for Quantum Information and Control, UNM**, Albuquerque. –seminar on *Topology and quantum phases in low dimensional fermionic systems*.

- Jan, 2017 City University of New York Graduate Centre, New York.

  -invited talk on Boosted one dimensional superfluids on a lattice.
- April, 2016 Centre for Condensed Matter Theory, IISc, Bangalore, India.

  -seminar on Correlation dynamics during a slow interaction quench in a one-dimensional Bose gas.
- May, 2013 Centre for Condensed Matter Theory, IISc, Bangalore, India.

  -seminar on Spin Imbalance and spin-charge separation in mesoscopic superconductor.

## Conference Presentations

- March, 2020 APS March Meeting 2020, Denver.
  - poster presentation on Accessing different topological classes and types of Majorana fermions in coupled superconducting platforms.
  - Feb, 2020 **Southwest Quantum Information and Technology Worskhop**, University of Oregon, Eugene.
    - poster presentation on Accessing different topological classes and types of Majorana fermions in coupled superconducting platforms.
  - Sep, 2019 APQC Worskhop, Estes Park, Colorado.
     poster presentation on Complexity of sampling bosonic atoms in the presence of weak interactions.
  - June, 2019 **TQC+NISQ Worskhop**, University of Maryland, Maryland.

     poster presentation on *Disorder-free Localization in the Kitaev honeycomb model*.
  - Feb, 2019 Southwest Quantum Information and Technology Workshop, Albuquerque, New Mexico.
    - poster presentation on Disorder-free Localization in the Kitaev honeycomb model.
  - July, 2018 Gordon Research Conference, Boston, Massachussettts.

     poster presentation on Behaviour of quench errors in the Kitaev honeycomb model.
  - Mar, 2018 American Physical Society March Meeting, Los Angeles.

     poster presentation on Symmetry classes and topological properties of 1D superconductors
  - Mar, 2018 American Physical Society March Meeting, Los Angeles.
    - oral presentation on  $Photo-induced\ SU(3)$  topological material of spinless fermions.
  - Feb, 2018 **Southwest Quantum Information and Technology Workshop**, Santa Fe, New Mexico.
    - poster presentation on Information scrambling of one dimensional symmetry protected topological phases from thermalized boundaries via tensor networks.
  - Jun, 2016 Advances in Strongly Correlated Electronic Systems, University of Minnesota, Minneapolis, USA.
    - poster presentation on Boosted one-dimensional superfluids on a lattice.
  - Jan, 2016 International Workshop on Emergent Phenomena in Quantum Hall Systems, Tata Institute of Fundamental Research, Mumbai, India.
    - poster presentation on Assembling topological insulators with lasers.

Aug, 2014 Conference on Field Theory Methods in Low Dimensional Strongly correlated Quantum Systems, International Centre for Theoretical Physics, Trieste, Italy.

- poster presentation on FFLO order in a 1D p-wave superfluid: a Bosonization study.