Anushya Chandran

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EMPLOYMENT

Martin Gutzwiller Fellow, MPIPKS 2025 Guest scientist, MPIPKS, 2024 - 2025 Associate professor, Boston University, 2023 - Present Assistant professor, Boston University, 2016 - 2023 Postdoctoral fellow, Perimeter Institute, 2013 - 2016

EDUCATION

Ph.D. Physics, Princeton University, 2008 - 2013 B. Tech in Electrical Engineering, Indian Institute of Technology Madras, 2004 - 2008

CURRENT GRANTS

Co-Principle Investigator on 'Non-reciprocal circuit-QED devices using synthetic band topology', 3 year DOD/AFOSR grant (2024-2027), Award amount: \$858,781

PREVIOUS GRANTS

Principle Investigator on 'Exploiting Strong Driving for Next Generation Quantum Devices', 3 year DOD/AFOSR grant (2020-2024), Award amount: \$449,995 Principle Investigator on CAREER: Topology and symmetry in non-equilibrium quantum systems, 5 year NSF DMR (2018-2024), Award amount: \$575,000 Sloan research fellow, 2018-2020, Award amount: \$65,000

AWARDS AND HONORS

Martin Gutzwiller-Fellow of 2025 (To be announced in April 2025) Member of the executive committee of the division of condensed matter physics (DCMP) at the American physical Society (2022-2025) Sloan research fellow, 2018-2020 Centennial Fellowship, Princeton, 2008-2013 Summer fellow, Indian Academy of Sciences, 2006 Certificate of Merit (All India Rank 92), Indian Institute of Technology, 2004

INVITED CONFERENCE TALKS AND COLLOQUIA

- Title: Non-reciprocity in near-term quantum platforms. Theory colloquium at the University of Cologne, colloquium at the Munich Center for Quantum Science and Technology (Jan 2025).
- Title: Resonances and the glassy many-body-localized regime. At the conference on "Localization: Emergent Platforms and Novel Trends" at MPIPKS, Sept 2024.
- Title: Autonomous cooling into Floquet states using static dissipation. At the workshop on "Novel Emergent Phenomena in Many-Body Systems" in the École De Physique Des Houches, Les Houches, Aug 2024. At the workshop, "Non-equilibrium physics beyond the Floquet paradigm" at MPIPKS, June 2024.
- Title: Many-body localization: Alive Enough! Colloquium at UIUC, Feb 2024.
- Title: Efficient local classical shadow tomography in systems with fundamental number conservation. At the Kick-Off meeting DFG Research Unit, MPIPKS Dresden, Dec 2023. At the Ultra quantum matter workshop in Harvard, Sept 2023.
- Title: Quasiperiodic driving: a tool in the quantum mechanic's toolbox. Colloquium at UW, Dec 2023, Rice and at Wash U, Feb 2023.
- Title: The numerically and experimentally accessible thermal-many-body-localized crossover. At the conference on "Recent developments in strongly-correlated quantum matter", Nordita, June 2022.
- Title: The thermal to pre-thermal many-body localization crossover. Invited Session on "Many-Body Localization: Phenomenology and Instabilities", March meeting, Chicago, March 2022.
- Title: The numerically and experimentally accessible thermal-many-body-localized crossover. At the hybrid conference, "Ergodicity Breaking and Anomalous Transport in Quantum Many-Body Systems", MPIPKS Dresden Oct 2021.
- Title: Quantized energy pumps far out of equilibrium. At the conference on "Non-Equilibrium Universality in Many-Body Physics", KITP, Sept 2021.
- Title: Partial thermalisation of a two-state system coupled to a finite quantum bath". At the "Virtual scientific party: Informal meeting on quantum many-body problems", MPIPKS Dresden, Apr 2021.
- Title: A constructive theory of the numerically accessible many-body localization transition. At the online workshop, "New perspectives on quantum many-body chaos, Royal Society", Feb 2021.
- Title: Thwarting long-lived dark states to speed up dynamic polarization. At the online workshop, "Emergence & Dynamics in Quantum Matter", Korea, Feb 2021.

- Title: A constructive theory of the numerically accessible many-body localization transition. At the online conference, "Frontiers of Quantum Computing and Quantum Dynamics", KITP, Oct 2020.
- Title: Stability of scars to perturbations. Invited session on "Quantum Many-Body Scars", March meeting, Denver, March 2020 (cancelled by COVID).
- Title: Topological classes of dynamics in quasi-periodically driven systems. At the workshop, "Quantum Matter" (part of the Quantum Matter in Mathematics and Physics program), Harvard CMSA, Dec 2019.
- Title: When statistical mechanics does not emerge in isolated quantum systems. At the Greater Boston Area Statistical Mechanics Meeting, Brandeis University, Oct 2019.
- Title: Half-Integer Quantized Topological Response in Quasiperiodically Driven Quantum Systems. At the workshop, "Realizations and Applications of Quantum Coherence in Non-Equilibrium Systems", Aspen, July 2019.
- Title: Avalanches in realistic spin chains. At the workshop, "The many facets of non-equilibrium physics", Mazara, July 2019.
- Title: Avalanches in realistic spin chains. At the workshop, "Ergodicity breaking in quantum physics", Galileo Galilei Institute, Florence, June 2019.
- Title: Quantum dynamics of frustrated systems. At the workshop, "2nd Asia-Pacific Workshop on Quantum Magnetism", ICTS Bengaluru, Dec 2018.
- Title: Three short stories on quantum dynamics of constrained systems. At the workshop, "Statistical mechanics out-of-equilibrium", Princeton, Apr 2018.
- Title: Schrödinger's clowder: Entanglement in many-body systems. Colloquium at U Mass Boston, Apr 2018.
- Title: Schrödinger's clowder: Entanglement in many-body systems. Colloquium at Brandeis, Mar 2018.
- Title: Dynamics in topological phases with constrained Hilbert spaces. Invited session on "Non-equilibrium dynamics in topological phases of matter", March meeting, Los Angeles, March 2018.
- Title: Constraint driven localization and thermalization. At the workshop, "Hydrodynamics, ergodicity, entanglement and localization in interacting lattice models and field theories", Simons Center at Stonybrook, Nov 2017.
- Title: Thermal inclusions and how a single spin can destroy the many-body localized phase. At the workshop on "Quantum Matter" (part of International Conference in Statistical Physics), Corfu, July 2017.
- Title: Thermal inclusions and how a single spin can destroy the many-body localized phase. At the "Conference on Many-Body-Localization: Advances in the Theory and Experimental Progress", ICTP (Trieste), July 2017.

- Title: Thermal inclusions and how a single spin can destroy the many-body localized phase. At the workshop, "Emergent Phenomena and Universality in Correlated Quantum Systems Far Away from Equilibrium", Physikzentrum Bad Honnef (Germany), June 2017.
- Title: Schrödinger's clowder: Entanglement in many-body systems. Colloquium at CUNY Graduate Center, Mar 2017.
- Title: Localization and symmetry breaking in the quantum quasiperiodic Ising glass. At the workshop, "Breakdown of ergodicity in quantum systems: from solids to synthetic matter", The Royal Society (London), Feb 2017.
- Title: Thermalization in anyonic systems. At the workshop, "Strongly correlated matter: Present and Future", Weizmann Institute, Dec 2016.
- Title: Schrödinger's clowder: Entanglement in many-body systems. Colloquium at Boston University, Nov 2016.
- Title: Heating in periodically driven Floquet systems. At the conference on "Mathematical Results in Quantum Physics", Georgia Tech, Oct 2016.
- Title: When do Floquet systems fail to heat?. Invited Session on "Topology and localization in Floquet systems" at the March Meeting in Baltimore, 2016.
- Title: Finite-size scaling of the many-body localization phase transition. At the conference on "Aspects and Applications of Many-Body Localization" in KITP, Nov 2015.
- Title: Finite-size scaling of the many-body localization phase transition. Conference: Frustration, Disorder and Localization, ICTP, Sept 2015.
- Title: Finite-size scaling of the many-body localization phase transition. Workshop: Non-Equilibrium Quantum Frontier, Princeton, Aug 2015.
- Title: Thermalization and localization in a solvable circuit model. At the conference on "Closing the entanglement gap: Quantum information, quantum matter, and quantum fields" in KITP, June 2015.
- Title: Thermalization and localization in a solvable circuit model. At the conference on "Aspects of Non-Equilibrium Dynamics in Quantum Computation" in CUNY, April 2015.
- Title: Thermalization and localization in a solvable circuit model. At the conference on "Many-body dynamics out of equilibrium", MPIPKS Dresden, March 2015.
- Title: The entanglement spectrum as a tool in condensed matter physics. At the conference on Quantum Science in the Gordon Research Seminar, Stonehill College, July 2014.
- Title: Integrals of motion in many-body localized systems. At the conference, "Quantum Matter" in Benasque, June 2014.
- Title: Equilibration and coarsening in the O(N) model. Invited Session on non-equilibrium dynamics at the APS March Meeting, Denver, 2014.
- Title: Symmetry and localization protected quantum orders. At the conference, "Topological Matter Out of Equilibrium", MPIPKS (Dresden), March 2014.

- Title: Universal driven dynamics near phase transitions. At the conference, "Emergence in complex systems", Perimeter, Feb 2014.
- Title: The Kibble-Zurek Problem, Universality and the scaling limit. At the conference, "Frontiers of quantum condensed matter physics", CUNY, March 2012.

INVITED SEMINARS AND WEBINARS

- "Autonomous cooling into Floquet states using static dissipation", at the condensed matter seminar series in TU Munich, Nov 2024.
- "Many-body localization: alive enough!", in the CMP seminar at Harvard, April 2024.
- "Efficient local classical shadows with number conservation", in the IBM Qiskit seminar series, March 2024.
- "The statistical Jacobi approximation to quantum dynamics", at Stanford, Oct 2023.
- "Quasi-periodic driving: a tool in the quantum mechanic's toolbox", at the Rutgers Mathematical Physics Webinar, Jan 2024, at Cambridge, March 2023, at Northwestern, Feb 2023, at McGill, Feb 2023, at Oxford, Jan 2023, at Caltech, Dec 2022, at UBC, Oct 2022.
- "Phenomenology of the pre-thermal many-body localized phase", at the Max Planck Institute for Complex Systems in Dresden, July 2022.
- "Quantization of dynamics in quasi-periodically driven systems", at the University of Maryland at College Park, Apr 2022, at the CANES seminar series in King's College London, Mar 2022, at the ICTP in Trieste, Nov 2021, at the Center for Ultracold Atoms (CUA) at MIT and Harvard University, Oct 2021.
- Online seminar on "Thwarting long-lived dark states to speed up dynamic polarization" at TU Munich, Tel Aviv University, June 2021, the Cavendish Laboratory in Cambridge, May 2021, UMass Lowell, Apr 2021.
- "A constructive theory of the numerically accessible many-body localized to thermal crossover" at the Indian Institute of Science in Bangalore, June 2022, the Simons collaboration on cracking the glass problem (webinar), Apr 2021.
- "Quantized topological responses in quasi-periodically driven qubits" at the Quantum Matters Seminar (online), Oct 2020.
- "Scars, integrability and central spin models" at the Center for Ultracold Atoms (CUA) at MIT and Harvard University, Feb 2020.
- "Avalanche induced co-existence of localized and thermal regions in disordered chains" at Caltech, Oct 2019.
- "Constraint-driven localization and thermalization" at ITAMP (Harvard), Dec 2017.
- "New phase transitions and Ising glasses in the quantum quasiperiodic Ising chain" at Ohio State, Oct 2017.

- "Thermal inclusions: how a single spin can destroy the many-body localized phase" at UC Riverside, Oct 2017.
- "Many-body localization beyond eigenstates in all dimensions" at UC Boulder, May 2016.
- "Shaking up statistical physics in interacting systems" at Northwestern, March 2016, Michigan State, March 2016, Rutgers, Feb 2016, MIT, Feb 2016, University of Oregon, Feb 2016, University of Washington, Feb 2016, University of Alberta, Feb 2016, Boston University, Jan 2016, Princeton, Jan 2016, UCSD, Jan 2016.
- "To thermalize or not: isolated quantum dynamics" at UMass Amherst, Dec 2015.
- "Thermalization vs localization in a solvable circuit model" at UCL, Aug 2015. Oxford, Aug 2015. Cambridge, Aug 2015. UIUC, Nov 2014.
- "Integrals of motion in many-body localized systems" at MPIPKS (Dresden), July 2014.
- "Non-equilibrium topological matter" at University of Toronto, November 2013.
- "Equilibration and coarsening in the quantum O(N) model" at Boston University, May 2013.
- "Kibble-Zurek scaling and string net coarsening in topologically ordered systems" at Los Alamos National Laboratory, July 2013.
- "Universal driven dynamics near phase transitions: Kibble-Zurek ramps with and without an order parameter" at Perimeter, Jan 2013.
- "The Kibble-Zurek problem: scaling and universality at Landau and non-Landau transitions" at KITP, August 2012, Harvard, April 2012, IISc (Bangalore), Jan 2012.
- "Entanglement spectra in fractional quantum Hall states" at Harvard, April 2011.

ORGANIZATIONAL ROLES

- Co-organizer: Max Planck Institute for Complex Matter on "Quantum meets classical", Oct 7-11, 2024.
- Co-organizer: Thouless Institute for Quantum Matter Winter Workshop on "New Developments in Fractionalization", Jan 13-15, 2024.
- Co-organizer: Boulder summer school on "Non-equilibrium quantum dynamics", July 3-29, 2023.
- Co-organizer: Aspen summer program on "Exotic Phases, Gauge Field Theories and Dynamics in Systems with Constraints", June 4-July 2, 2023.
- Co-organizer: Aspen summer program on "New Directions for Quantum Dynamics in Topological, Disordered, and Correlated Systems", June 20-July 11, 2021.
- Co-Organizer, ICAM-BU/CUNY E-Workshops on Nonequilibrium Quantum Dynamics, March-April 2021.
- Co-organizer: ICAM-BU/CUNY workshop on "Correlated Phases and Hydrodynamics in Driven Systems", Apr 2020 (postponed by COVID).

- Co-organizer: ICAM-BU/CUNY workshop on "Snapshots of quantum dynamics: constraints, integrability and hidden orders", Mar 11-13, 2019.
- Co-organizer: ICAM-BU/CUNY workshop on "Non-thermal Quantum Systems: glassiness, scrambling, and dynamical control", Mar 11-14, 2018.
- Co-organizer: ICAM-BU/CUNY workshop on "Dynamics and hydrodynamics of certain quantum matter", Mar 20-23, 2017.
- Co-organizer: Aspen winter program on "Quantum dynamics: from models to materials", Jan 15-21, 2017.
- Co-organizer: KITP program on "Many-body Localization", Oct 12-Dec 18, 2015.
- Co-organizer: "Quantum many-body dynamics" workshop, Perimeter Institute, May 12-16, 2014.
- Co-organizer: Princeton Summer School in Condensed Matter Physics, 2009-2012.

TEACHING

Associate Professor

- Quantum mechanics 2 PY512, Spring 2024
- Quantum computing PY536, Fall 2023 Assistant Professor
- Special topics in condensed matter PY896 C4, Spring 2020
- Intermediate mechanics PY408, Fall 2019, Fall 2020, Fall 2021
- Introduction to solid state physics PY543, Spring 2017, Spring 2018, Spring 2019
- Waves and modern physics PY313, Spring 2022, Spring 2023

Lecturer

- The MPIPKS masters school on "Collective Phenomena in Quantum Many-Body Physics: From Quantum Matter to Light" (Sept 2024)
- The Boulder summer school on "Non-equilibrium quantum dynamics" (July 2023)
- The 3rd condensed matter summer school on ""Dynamics and Quantum Information in Many-body Systems" held at the University of Minnesota (June 2023)
- VSF Floquet summer school (Sept 2022)
- ICTP theory summer school on "Quantum Dynamics: From Electrons to Qbits" (Aug 2022)
- MagLab theory winter school on "Non-equilibrium quantum matter" (Jan 2022)
- Les Houches scientific schools: "New Developments in Topological Condensed Matter" (Sept 2019), "Dynamics of Complex Systems, from Theory to Computation' (April 2021)
- Freshman Seminar for Physics PY195, Fall 2019, Fall 2020, Fall 2022

- Princeton Summer School on Quantum Information, Aug 2017
- Condensed matter module of Perimeter Scholars Initiative (PSI), Fall 2013

SCIENTIFIC SERVICE

Elected member of executive committee of the division of condensed matter physics (DCMP) at the American physical Society (2022-2025)

APS DCMP Fellowship committee 2023, 2024

APS prize and award selection committee for the 2023 Oliver Buckley Prize in Condensed Matter Physics

APS DCMP Global Physics Summit Travel Caregiver awards committee 2023, 2024 Mentor for Dr. Poetri Tarabunga as a part of the mentoring program at the Munich Center for Quantum Science and Technology (2025-) APS March meeting abstract sorting lead 2022-2024 NSF DMR Ad Hoc Referee, 2019-Present

Referee: Physical Review B, E, X, Letters; J. Stat. Phys.; SciPost

DEPARTMENTAL/UNIVERSITY SERVICE

Member of the faculty council of the College of Arts and Sciences Member of the merit review committee (2024-) Chair of the website Committee (2023-) Cosmology theory and experiment search committee (Fall 2023, Fall 2022) Ad-Hoc Subcommittee on a Master's Program in Quantum Science & Engineering (2021-Present) High energy experiment search committee (Spring 2020) Graduate student admissions/retention/recruitment (2016-2018, 2021) Committee on Outreach and Diversity (2017-2020) Undergraduate curriculum revision subcommittee (2019) Ad-hoc sub-committee for Ouantum NRT (2019) Faculty advisor for "Women in Physics" campus group (2017-Present) Condensed matter experiment search committee (Spring 2017) Condensed matter/biophysics seminar series organizer (2016-2019) Qualifying exam committee in Materials Science and Engineering (Spring 2017, 2018 and 2019)

SCIENTIFIC OUTREACH

Plenary talk on "What is Quantum Information Science?" at the regional CUWiP conference held at Boston College, Jan 2024. Presentation at CUWiP Jan 2023.

Outreach through dance performance on the forces of life and on gravity, BU dance theatre, Sept 2023.

"Measuring e/m" with Sharon, Bedford and Newton South high school students, 2018-2020.

Lecture on "Topology in spin chains" in the Frontiers in Condensed Matter Physics series, Columbia University, April 2017.

Lectures at Photon, the Society of Physics Students at Boston University, April 2017, Nov 2020.

Public Lecture on "Getting Stuck: Shaking Up Statistical Physics" at KITP, Oct 2015.

GROUP MEMBERS

Robin Schaefer, BU CMT Postdoctoral Fellow, (2023-Present) Souvik Bandyopadhyay, BU CMT Postdoctoral Fellow, (2023-Present) Long-Hin Tang, Graduate student (2019-Present) Dominik Vuina, Graduate student (2020-Present) Bernardo Barrera, Graduate student (2022-Present) Shreyas Raman, Graduate Student (2023-Present)

PREVIOUS GROUP MEMBERS

David Long, PhD in 2023. Currently a postdoctoral fellow at Stanford.

Michael Flynn, BU CMT Postdoctoral Fellow, (2021-2023).

Renzo Villazon Scholer, PhD in 2021. Currently a data scientist at Tamr.

Preethi Basani, Undergraduate student (2021-2022). Currently a graduate student at UIUC.

Philip Crowley, Post-doc 2017-2020. Currently a post-doc with Prof. Yao at Harvard.

PUBLICATIONS

- 62. "A strong-driving toolkit for topological Floquet energy pumps with superconducting circuits", M. Ritter, D. M. Long, Q. Yue, M. Amouzegar, A. Chandran, A. J. Kollár, arXiv:2501.17915 (2025). In review at Phys. Rev. A.
- 61. "Autonomous Stabilization of Floquet States Using Static Dissipation", M. Ritter, D. M. Long, Q. Yue, A. Chandran, A. J. Kollár, arXiv:2410.12908 (2024). In review at Phys. Rev. X.
- 60. Viewpoint titled "Constraining Many-Body Localization" in Physics 17, 24 (2024).
- ^{59.} "Absence of disordered Thouless pumps at finite frequency", D. Vuina, D. M. Long, P.J.D. Crowley, A. Chandran, Phys. Rev. B. 110, 174303 (2024).
- ^{58.} "Efficient Local Classical Shadow Tomography with Number Conservation", S. Hearth, M.O.Flynn, A. Chandran, C.R.Laumann, Phys. Rev. Lett. 133, 060802 (2024).
- ^{57.} "Beyond Fermi's Golden Rule with the statistical Jacobi approximation", D. Long, D. Hahn, M. Bukov, A. Chandran, SciPost Phys. 15, 251 (2023).
- 56. "Unitary k-designs from random number-conserving quantum circuits", S. Hearth, M.O.Flynn, A. Chandran, C.R.Laumann, arXiv:2306.01035 (2023). In review at Phys. Rev. X.
- ^{55.} "Prethermal stability of eigenstates under high frequency Floquet driving", N. O'Dea, F. Burnell, A. Chandran, V. Khemani, Phys. Rev. Lett. 132, 100401 (2024).
- ^{54.} "Giant energy oscillations mediated by a quasiperiodically driven qubit", D. Vuina, D. M. Long, P.J.D. Crowley, A. Chandran, Phys. Rev. B 108, 134303 (2023).
- ^{53.} "Integrability and quench dynamics in the spin-1 central spin XX model", L.-H. Tang, D.
 M. Long, A. Polkovnikov, A. Chandran, P. Claeys, SciPost Physics 15, 030 (2023).
- ^{52.} "Coupled layer construction for quasi periodically driven energy pumps", D. M. Long, P.J.D. Crowley, A. Chandran. PRB 106, 144203 (2022).
- ^{51.} "Phenomenology of the prethermal many-body localized regime", D. M. Long, P.J.D. Crowley, V. Khemani, A. Chandran, Phys. Rev. Lett. 131, 106301 (2023).
- ^{50.} "Quantum Many-Body Scars: A Quasiparticle Perspective", A. Chandran, T. Iadecola, V. Khemani, R. Moessner. Annual review of Condensed Matter Physics 14, 443 (2023).
- 49. "Momentum space entanglement of interacting fermions", M.O. Flynn, L-H. Tang, A. Chandran, C.R. Laumann. Phys. Rev. B 107, L081109 (2023).

- 48. "Mean field theory of failed thermalizing avalanches", P.J.D. Crowley, A. Chandran. Phys. Rev. B 106, 184208 (2022).
- 47. "Multi-magnon quantum many-body scars from tensor operators", L-H. Tang, N. O'Dea, A. Chandran. Phys. Rev. Research 4, 043006 (2022).
- 46. "Boosting the Quantum State of a Cavity with Floquet Driving", D. M. Long, P.J.D. Crowley, A. Kollar, A. Chandran. Phys. Rev. Lett. 128, 183602 (2022).
- 45. "Many-Body Localization with Quasiperiodic Driving", D. M. Long, P.J.D. Crowley, A. Chandran. Phys. Rev. B 105, 144204 (2022).
- 44. "Partial thermalisation of a two-state system coupled to a finite quantum bath", P.J.D. Crowley, A. Chandran. SciPost Phys. 12, 103 (2022).
- 43. "A constructive theory of the numerically accessible many-body localized to thermal crossover", P.J.D. Crowley, A. Chandran. SciPost Phys. 12, 201 (2022).
- 42. "Non-adiabatic topological energy pumps with quasiperiodic driving", D. M. Long, P.J.D. Crowley, A. Chandran. Phys. Rev. Lett. 126, 106805 (2021).
- ^{41.} "Shortcuts to dynamic polarization", T. Villazon, P. W. Claeys, A. Polkovnikov, A. Chandran. Phys. Rev. B 103, 075118 (2020).
- 40. "From tunnels to towers: quantum scars from Lie Algebras and q-deformed Lie Algebras", N. O'Dea, F.J. Burnell, A. Chandran, V. Khemani. Phys. Rev. Research 2, 043305 (2020).
- ^{39.} "Persistent dark states in anisotropic central spin models", T. Villazon, P. W. Claeys, M. Pandey, A. Polkovnikov, A. Chandran. Scientific Reports 10, 16080 (2020).
- ^{38.} "Exploring 2D synthetic quantum Hall physics with a quasi-periodically driven qubit",
 E. Boyers, P.J.D. Crowley, A. Chandran, A. O. Sushkov. Phys. Rev. Lett. 125, 160505 (2020).
- ^{37.} "Integrability and dark states in an anisotropic central spin model", T. Villazon, A. Chandran, P. Claeys. Phys. Rev. Research 2, 032052 (2020).
- 36. "Avalanche induced co-existing localised and thermal regions in disordered chains",P.J.D. Crowley, A. Chandran. Phys. Rev. Research 2, 033262 (2020).
- 35. "Slow Thermalization of Exact Quantum Many-Body Scar States Under Perturbations", Cheng-Ju Lin, A. Chandran, O. Motrunich. Phys. Rev. Research 2, 033044 (2020).
- 34. "Do Rydberg chains yield Fibonacci anyons?", A. Chandran, F.J. Burnell, S.L. Sondhi. Phys. Rev. B. 101, 075104 (2020).

- ^{33.} "Half-integer quantized response in strongly driven quantum systems", P.J.D. Crowley, I. Martin, A. Chandran. Phys. Rev. Lett. 125, 100601 (2020).
- 32. "Swift heat transfer by fast-forward driving in open quantum systems", T. Villazon, A. Polkovnikov, A. Chandran. Phys. Rev. A 100, 012126 (2019).
- ^{31.} "Critical behavior of the quasi-periodic quantum Ising chain", P.J.D. Crowley, C.R. Laumann, A. Chandran. J. Stat. Mech. 8, 083102 (2022).
- 30. "Universal entanglement of typical states in constrained systems", S. Morampudi, A. Chandran, C.R. Laumann. Phys. Rev. Lett. 124, 050602 (2020).
- 29. "Topological classification of quasi-periodically driven quantum systems", P.J.D. Crowley, I. Martin, A. Chandran. Phys. Rev. B 99, 064306 (2019).
- 28. "Signatures of integrability in the dynamics of Rydberg-blockaded chains", V. Khemani, C.R. Laumann, A. Chandran. Phys. Rev. B Rapid 99, 161101 (2019).
- 27. "The quasi-periodic quantum Ising transition in 1D", P.J.D. Crowley, A. Chandran, C.R. Laumann. Phys. Rev. Lett, 120, 175702 (2018).
- ^{26.} "How does a locally constrained quantum system localize?", C. Chen, F.J. Burnell, A. Chandran. Phys. Rev. Lett. 121, 085701 (2018).
- 25. "Thermal inclusions: how one spin can destroy a many-body localized phase", P. Ponte, C.R. Laumann, D.A Huse, A. Chandran. Phil. Trans. R. Soc. A 375 20160428 (2017).
- ^{24.} "Localization and symmetry breaking in the quantum quasiperiodic Ising glass", A. Chandran, C.R. Laumann. Phys. Rev. X 7, 031061 (2017).
- 23. "The eigenstate thermalization hypothesis in constrained Hilbert spaces: a case study in non-Abelian anyon chains," A. Chandran, M.D. Schulz, F.J. Burnell. Phys. Rev. B 94, 235122 (2016).
- "Universal corner entanglement of Dirac fermions and gapless bosons from the continuum to the lattice," J. Helmes, L. Sierens, A. Chandran, W. Witczak-Krempa, R. Melko. Phys. Rev. B 94, 125142 (2016).
- "Many-body localization beyond eigenstates in all dimensions," A. Chandran, A. Pal, C.R. Laumann, A. Scardicchio. Phys. Rev. B 94, 144203 (2016).
- 20. "When is an area law not an area law?", A. Chandran, C.R. Laumann, R.D. Sorkin. Entropy 18, 240 (2016).
- "Finite size scaling bounds on many-body localized phase transitions," A. Chandran, C.R. Laumann, V. Oganesyan. arXiv:1509.04285 (2015).

- ^{18.} "Interaction stabilized steady states in the driven O(N) model", A. Chandran, S.L. Sondhi. Phys. Rev. B 93, 174305 (2016).
- ^{17.} "Emergent Coulombic criticality and Kibble-Zurek scaling in a topological magnet," J. Hamp, A. Chandran, R. Moessner, C. Castelnovo. Phys. Rev. B 92, 075142 (2015).
- ^{16.} "A semi-classical limit for the many-body localization transition," A. Chandran, C.R. Laumann. Phys. Rev. B 92, 024301 (2015).
- ^{15.} "Local integrals of motion and the logarithmic lightcone in many-body localized systems," I.H. Kim, A. Chandran, D.A. Abanin. arXiv:1412.3073 (2014).
- ^{14.} "Spectral tensor networks for many-body localization," A. Chandran, I.H. Kim, J. Carrasquilla, D.A. Abanin, G. Vidal. Phys. Rev. B 92, 024201 (2015).
- ^{13.} "Constructing local integrals of motion in the many-body localized phase," A. Chandran, I.H. Kim, G. Vidal, D.A. Abanin. Phys. Rev. B 91, 085425 (2015).
- 12. "Eigenstate Thermalization and Representative States on Subsystems," V. Khemani, A. Chandran, H. Kim, S.L. Sondhi. Phys. Rev. E 90, 052133 (2014).
- "Periodically driven ergodic and many-body localized quantum systems," P. Ponte, A. Chandran, Z. Papić, D.A. Abanin. Annals of Physics 353, 196 (2015).
- 10. "How universal is the entanglement spectrum?" A. Chandran, V. Khemani, S.L. Sondhi. Phys. Rev. Lett. 113, 060501 (2014).
- 9. "Many-body localization and symmetry protected topological order," A. Chandran, V. Khemani, C.R. Laumann, S.L. Sondhi. Phys. Rev. B. 89, 144201 (2014).
- 8. "On equilibration and coarsening in the quantum O(N) model at infinite N," A. Chandran, A. Nanduri, S.S. Gubser, S.L. Sondhi. Phys. Rev. B 88, 024306 (2013).
- "Kibble-Zurek scaling and string-net coarsening in topologically ordered systems," A. Chandran, F. Burnell, V. Khemani, S.L. Sondhi. J. Phys.: Condens. Matter 25, 404214 (2013).
- 6. "Kibble-Zurek Problem: Universality and the scaling limit," A. Chandran, A. Erez, S.S. Gubser, S.L. Sondhi. Phys. Rev. B 86, 064304 (2012).
- "Real space entanglement spectra of quantum Hall states," A. Sterdyniak, A. Chandran, N. Regnault, B.A. Bernevig, P. Bonderson. Phys. Rev. B 85, 125308 (2012).
- 4. "Bulk-edge correspondence in entanglement spectra," A. Chandran, M. Hermanns, N. Regnault, B.A. Bernevig. Phys. Rev. B 84, 205136 (2011).

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