

RICCARDO COMIN

Curriculum Vitae

Born 25/03/1985. Citizen of Italy and USA.

Current address

Department of Physics, Massachusetts Institute of Technology
77 Massachusetts Avenue, Room 13-2153
Cambridge, MA 02139-4307
617-253-7834
rcomin@mit.edu

Education

- B.S. in Physics, Università degli Studi di Trieste (01/09/2004 – 01/07/2007)
- M.S. in Physics, Università degli Studi di Trieste (01/09/2007 – 01/07/2009)
- Ph.D. in Physics, University of British Columbia (01/09/2009 – 14/12/2013)

Professional positions

- Postdoctoral Associate, Department of Electrical and Computer Engineering, University of Toronto (01/04/2014 – 30/04/2016)
- Assistant Professor, Department of Physics, Massachusetts Institute of Technology (01/07/2016 – 30/06/2021)
- Distinguished Scientist, Elettra Sincrotrone Trieste (10/2020 – current).
- Associate Professor, Department of Physics, Massachusetts Institute of Technology (01/07/2021 – current)

Honors

- Wilhelm Bessel Research Award (Alexander von Humboldt Foundation), 2025
- PRISM prize (Centro Nazionale Ricerche), 2022
- Early Career Research Program Award, Department of Energy, 2021.
- Frank E. Perkins Award for excellence in graduate advising, MIT, 2021.
- Class of 1947 Career Development Assistant Professorship, MIT, 2019.
- Sloan Fellowship, Sloan Research Foundation, 2018.
- Young Investigator Research Program, Air Force Office of Scientific Research, 2018.
- Faculty Early Career Development Program, National Science Foundation, 2017.
- Young Investigator Award, Canadian Light Source, 2017.
- Bryan R. Coles Prize, SCES conference, 2016.

McMillan Award, University of Illinois at Urbana-Champaign, 2015.
John Charles Polanyi Prize in Physics, Government of Ontario, 2015.
Fonda-Fasella Award, Elettra Sincrotrone Trieste, 2014.
Postdoctoral Fellowship, Natural Sciences and Engineering Research Council of Canada, 2014-2016.
CLS Bancroft Award, Canadian Light Source, 2014.
4-year Fellowship, Faculty of Graduate Studies - University of British Columbia, 2009-2013.
Graduate Scholarship in Condensed Matter Physics, Collegio delle Scienze Luciano Fonda, 2007-2009.
Undergraduate Scholarship in Physics, Collegio delle Scienze Luciano Fonda, 2004-2007.

External Positions Held

Member, General Sciences Proposal Study Panel, Chair of Electrical Panel, Advanced Light Source, 2020-current.
Member, Proposal Review Panel, Diamond Light Source, 2023-current.
Chair, Spectroscopy/Condensed Matter Physics/Magnetism Proposal Review Panel, Advanced Photon Source, 2019-current.
Member, Cross-cutting review panel Advanced Light Source Quantum Materials program, 2018.
Chair, NSLS-II SAC Review Committee for the CSX Beamline, 2018.
Chair, Soft X-ray and Photoelectron Panel, National Synchrotron Light Source II, 2016-2020.
Member, Proposal Review Panel, Canadian Light Source, 2013-current.

Community Service

Conferences and meetings

- Organizer of Aspen Winter Conference 2025 on Altermagnetism.
- Organizer of “Flat Bands: Frustration and Correlation Physics” workshop at Flatiron Institute.
- Organizer of Altermagnetism workshop at FisMat2025 conference.
- International Program committee for the 13th International Conference on Materials and Mechanisms of Superconductivity & High Temperature Superconductivity (M2S 2022).
- International Program Advisory committee for RIXSREXS conference.

- Organizer of the GMAG Focus Topic at the 2020 APS March Meeting.
- Organizer of 2D materials symposium at ALS Users' Meeting 2019.

Review service (journals):

- APS: Phys. Rev. B, Phys. Rev. Letters, Phys. Rev. Materials, Phys. Rev. Research, Phys. Rev. X.
- Springer Nature: Nature, Nature Materials, Nature Physics, npj Quantum Materials, Nature Communications.
- AAAS: Science, Science Advances
- Proceedings of the National Academy of Sciences.
- Advanced Materials.
- Nano Letters.

Review service (grants):

- Department of Defense; Department of Energy; National Science Foundation.
- Moore Foundation.
- Deutsche Forschungsgemeinschaft (DFG).
- European Research Council (ERC).
- Swiss National Science Foundation (SNSF).

Editorial service:

- Associate Editor, *npj Quantum Materials*, Springer-Nature, 2022-current.

Publications

Google Scholar page: <https://scholar.google.com/citations?user=rzghv1sAAAAJ&hl=en>
 123 publications (49 prior to MIT; 74 from work at MIT, of which 40 led by our group)
 Citations: 33044; h-index: 55

List of publications led or co-led by our group

1. D. Oh, A. Hampel, J. P. Wakefield, P. C. Moen, S. Smit, X. Luo, M. Zonno, S. Gorovikov, M. Leandersson, C. Polley, A. K. Kundu, A. Rajapitamahuni, E. Vescovo, C. Jozwiak, A. Bostwick, E. Rotenberg, M. Isobe, M. Verma, M. Crispino, M. Grundner, F. B. Kugler, O. Parcollet, U. Schollwöck, H. Takagi, A. Damascelli, G. Sangiovanni, J. G. Checkelsky, A. Georges, **R. Comin**. Hund's flat band in a frustrated spinel oxide. *PNAS* **122**, e2518213122 (2025). DOI: 10.1073/pnas.2518213122
2. Q. Song, S. Stavric, P. Barone, A. Droghetti, D. S. Antonenko, J. W. F. Venderbos, C. A. Occhialini, B. Ilyas, E. Ergecen, N. Gedik, S.-W. Cheong, R. M. Fernandes, S. Picozzi, **R. Comin**. Electrical switching of a p-wave magnet. *Nature* **642**, 64 (2025). DOI: 10.1038/s41586-025-09034-7

3. A.K. Demir, L. Nessi, S. Vaidya, C.A. Occhialini, M. Soljačić, **R. Comin**. Tunable nanophotonic devices and cavities based on a two-dimensional magnet. *Nature Photonics* (2025). DOI: 10.1038/s41566-025-01712-2
4. C. A. Occhialini, L. Nessi, L. G.P. Martins, A. K. Demir, Q. Song, V. Hasse, C. Shekhar, C. Felser, K. Watanabe, T. Taniguchi, V. Bisogni, J. Pelliciari, **R. Comin**. Spin-Forbidden Excitations in the Magneto-optical Spectra of CrI₃ Tuned by Covalency. *Physical Review X* **15**, 031005 (2025). DOI: 10.1103/4km4-4rvn
5. Y. Tseng, C. A. Occhialini, Q. Song, P. Barone, S. Patel, M. Shankar, R. Acevedo-Esteves, J. Li, C. Nelson, S. Picozzi, R. Sutarto, **R. Comin**. Shear-Mediated Stabilization of Spin Spiral Order in Multiferroic NiI₂. *Advanced Materials* **37**, 2417434 (2025). DOI: 10.1002/adma.202417434
6. M. Kang, S. Kim, Y. Qian, P. M. Neves, L. Ye, J. Jung, D. Puntel, F. Mazzola, S. Fang, C. Jozwiak, A. Bostwick, E. Rotenberg, J. Fuji, I. Vobornik, J.-H. Park, J. G. Checkelsky, B.-J. Yang, **R. Comin**. Measurements of the quantum geometric tensor in solids. *Nature Physics* **21**, 110 (2025). DOI: 10.1038/s41567-024-02678-8
7. L. Nessi, C. A. Occhialini, A. K. Demir, L. Powalla, **R. Comin**. Magnetic Field Tunable Polaritons in the Ultrastrong Coupling Regime in CrSBr. *ACS Nano* **18**, 34235 (2024). DOI: 10.1021/acsnano.4c11799
8. D. Oh, J. Kang, Y. Qian, S. Fang, M. Kang, C. Jozwiak, A. Bostwick, E. Rotenberg, J. G. Checkelsky, L. Fu, T. Klimczuk, M. J. Winarski, B.-J. Yang, **R. Comin**. Nodal fermions in the strongly spin-orbit coupled pyrochlore-lattice compound RbBi₂. *Physical Review B* **110**, 205102 (2024). DOI: 10.1103/PhysRevB.110.205102
9. J. Li, R. J. Green, C. Domínguez, A. Levitan, Y. Tseng, S. Catalano, J. Fowlie, R. Sutarto, F. Rodolakis, L. Korol, J. L. McChesney, J. W. Freeland, D. Van der Marel, M. Gibert, and **R. Comin**. Signatures of polarized chiral spin disproportionation in rare earth nickelates. *Nature Communications* **15**, 7427 (2024). DOI: 10.1038/s41467-024-51576-3
10. C. A. Occhialini, Y. Tseng, H. Elnaggar, Q. Song, M. Blei, S. A. Tongay, V. Bisogni, F. M. F. de Groot, J. Pelliciari, and **R. Comin**. Nature of Excitons and Their Ligand-Mediated Delocalization in Nickel Dihalide Charge-Transfer Insulators. *Physical Review X* **14**, 031007 (2024). DOI: 10.1103/PhysRevX.14.031007
11. J. P. Wakefield, M. Kang, P. M. Neves, D. Oh, S. Fang, R. McTigue, S. F. Zhao, T. N. Lamichhane, A. Chen, S. Lee, S. Park, J.-H. Park, C. Jozwiak, A. Bostwick, E. Rotenberg, A. Rajapitamahuni, E. Vescovo, J. L. McChesney, D. Graf, J. C. Palmstrom, T. Suzuki, M. Li, **R. Comin**, J. G. Checkelsky. Three-dimensional flat bands in pyrochlore metal CaNi₂. *Nature* **623**, 301 (2023). DOI: 10.1038/s41586-023-06640-1
12. M. Kang, C. Zhang, E. Schierle, S. McCoy, J. Li, R. Sutarto, A. Suter, T. Prokscha, Z. Salman, E. Weschke, S. Cybart, J. Y. T. Wei, **R. Comin**. Discovery of bulk charge order in a cuprate Mott insulator. *Proceedings of the National Academy of Sciences* **120**, e2302099120 (2023). DOI: 10.1073/pnas.2302099120
13. A. K. Demir, J. Li, T. Zhang, C. A. Occhialini, L. Nessi, Q. Song, J. Kong, and **R. Comin**. Transferable Optical Enhancement Nanostructures by Gapless Stencil Lithography. *Nano Letters* **24**, 9882 (2024). DOI: 10.1021/acs.nanolett.4c02148
14. C. A. Occhialini, Y. Tseng, H. Elnaggar, Q. Song, M. Blei, S. A. Tongay, V. Bisogni, F. M. F. de Groot, J. Pelliciari, and **R. Comin**. Nature of Excitons and Their Ligand-Mediated Delocalization in Nickel Dihalide Charge-Transfer Insulators. *Physical Review X* **14**, 031007 (2024). DOI: 10.1103/PhysRevX.14.031007

15. J. P. Wakefield, M. Kang, P. M. Neves, D. Oh, S. Fang, R. McTigue, S. F. Zhao, T. N. Lamichhane, A. Chen, S. Lee, S. Park, J.-H. Park, C. Jozwiak, A. Bostwick, E. Rotenberg, A. Rajapitamahuni, E. Vescovo, J. L. McChesney, D. Graf, J. C. Palmstrom, T. Suzuki, M. Li, **R. Comin**, J. G. Checkelsky. Three-dimensional flat bands in pyrochlore metal CaNi_2 . *Nature* **623**, 301 (2023). DOI: 10.1038/s41586-023-06640-1
16. H. Li, D. Oh, M. Kang, H. Zhao, B. R. Ortiz, Y. Oey, S. Fang, Z. Ren, C. Jozwiak, A. Bostwick, E. Rotenberg, J. G. Checkelsky, Z. Wang, S. D. Wilson, **R. Comin**, and I. Zeljkovic. Small Fermi Pockets Intertwined with Charge Stripes and Pair Density Wave Order in a Kagome Superconductor. *Physical Review X* **13**, 031030 (2023). DOI: 10.1103/PhysRevX.13.031030
17. M. Kang, C. Zhang, E. Schierle, S. McCoy, J. Li, R. Sutarto, A. Suter, T. Prokscha, Z. Salman, E. Weschke, S. Cybart, J. Y. T. Wei, **R. Comin**. Discovery of charge order in a cuprate Mott insulator. *PNAS* **120**, e2302099120 (2023). DOI: 10.1073/pnas.2302099120
18. C. A. Occhialini, J. J. Sanchez, Q. Song, G. Fabbris, Y. Choi, J.-W. Kim, P. J. Ryan, **R. Comin**. Spontaneous orbital polarization in the nematic phase of FeSe . *Nature Materials* **22**, 985 (2023), DOI: 10.1038/s41563-023-01585-2
19. L. G. Pimenta Martins, D. A. Ruiz-Tijerina, C. A. Occhialini, J.-H. Park, Q. Song, A.-Y. Lu, P. Venezuela, L. G. Cançado, M. S. C. Mazzoni, M. J. S. Matos, J. Kong, **R. Comin**. Pressure tuning of minibands in $\text{MoS}_2/\text{WSe}_2$ heterostructures revealed by moiré phonons. *Nature Nanotechnology* **18**, 1147 (2023), DOI: 10.1038/s41565-023-01413-3
20. M. Kang, S. Fang, J. Yoo, B. R. Ortiz, Y. Oey, S. H. Ryu, J. Kim, C. Jozwiak, A. Bostwick, E. Rotenberg, E. Kaxiras, J. Checkelsky, S. D. Wilson, J.-H. Park, **R. Comin**. Charge order landscape and competition with superconductivity in kagome metals. *Nature Materials* **22**, 186 (2023), DOI: 10.1038/s41563-022-01375-2
21. A. Levitan, **R. Comin**. Error metrics for partially coherent wave fields. *Optics Letters* **47**, 2322 (2022). DOI: 10.1364/OL.455955
22. L. G. Pimenta Martins, B. R. Carvalho, C. A. Occhialini, N. P. Neme, J.-H. Park, Q. Song, M. S. C. Mazzoni, P. Venezuela, M. J. S. Matos, J. Kong, **R. Comin**. Electronic Band Tuning and Multivalley dynamics in monolayer TMDs at high pressures revealed by double-resonance Raman. *ACS Nano* **16**, 8064 (2022). DOI: 10.1021/acsnano.2c01065
23. Q. Song, C. A. Occhialini, E. Ergeçen, B. Ilyas, D. Amoroso, P. Barone, J. Kapeghian, K. Watanabe, T. Taniguchi, A. S. Botana, S. Picozzi, N. Gedik, **R. Comin**. Evidence for a single-layer van der Waals multiferroic. *Nature* **602**, 601 (2022). DOI: 10.1038/s41586-021-04337-x
24. M. Kang, S. Fang, J.-K. Kim, B. R. Ortiz, S. H. Ryu, J. Kim, J. Yoo, G. Sangiovanni, D. Di Sante, B.-G. Park, C. Jozwiak, A. Bostwick, E. Rotenberg, E. Kaxiras, S. D. Wilson, J.-H. Park, **R. Comin**. Twofold van Hove singularity and origin of charge order in topological kagome superconductor CsV_3Sb_5 . *Nature Physics* **18**, 301 (2022). DOI: 10.1038/s41567-021-01451-5
25. J. Li, S. Ramanathan, **R. Comin**. Carrier Doping Physics of Rare Earth Perovskite Nickelates RENiO_3 . *Frontiers in Physics* (2022). DOI: 10.3389/fphy.2022.834882
26. Z. Guo, A. L. Levitan, G. Barbastathis, **R. Comin**. Randomized probe imaging through deep k-learning. *Optics Express* **30**, 2247 (2022). DOI: 10.1364/OE.445498
27. K. Keskinbora, A. L. Levitan, **R. Comin**. Maskless Fourier Transform Holography. *Optics Express* **30**, 403 (2022). DOI: 10.1364/OE.444455

28. C. A. Occhialini, V. Bisogni, H. You, A. Barbour, I. Jarrige, J. F. Mitchell, **R. Comin**, J. Pelliciari. Local Electronic Structure of RuO₂. *Physical Review Research* **3**, 033214 (2021). DOI: 10.1103/PhysRevResearch.3.033214
29. J. Pelliciari, S. Karakuzu, Q. Song, R. Arpaia, A. Nag, M. Rossi, J. Li, T. Yu, X. Chen, R. Peng, M. García-Fernández, A. C. Walters, Q. Wang, J. Zhao, G. Ghiringhelli, D. Feng, T. A. Maier, K.-J. Zhou, S. Johnston, **R. Comin**. Evolution of spin excitations from bulk to monolayer FeSe. *Nature Communications* **12**, 3122 (2021). DOI: 10.1038/s41467-021-23317-3
30. J. Li, R. J. Green, Z. Zhang, R. Sutarto, J. T. Sadowski, Z. Zhu, G. Zhang, D. Zhou, Y. Sun, F. He, S. Ramanathan, **R. Comin**. Sudden Collapse of Magnetic Order in Oxygen-Deficient Nickelate Films. *Physical Review Letters* **126**, 187602 (2021). DOI: 10.1103/PhysRevLett.126.187602
31. A. Levitan, K. Keskinbora, U. Sanli, M. Weigand, **R. Comin**. Single-frame far-field diffractive imaging with randomized illumination. *Optics Express* **28**, 37103 (2020). DOI: 10.1364/OE.397421
32. M. Kang, S. Fang, L. Ye, H. C. Po, J. Denlinger, C. Jozwiak, A. Bostwick, E. Rotenberg, E. Kaxiras, J. G. Checkelsky, **R. Comin**. Topological flat bands in frustrated kagome lattice CoSn. *Nature Communications* **11**, 4004 (2020). DOI: 10.1038/s41467-020-17465-1
33. M. Kang, L. Ye, S. Fang, J.-S. You, A. Levitan, M. Han, J. I. Facio, C. Jozwiak, A. Bostwick, E. Rotenberg, M. K. Chan, R. D. McDonald, D. Graf, K. Kaznatcheev, E. Vescovo, D. C. Bell, E. Kaxiras, J. van den Brink, M. Richter, M. P. Ghimire, J. G. Checkelsky, **R. Comin**. Dirac fermions and flat bands in the ideal kagome metal FeSn. *Nature Materials* **19**, 163 (2020). DOI: 10.1038/s41563-019-0531-0
34. M. Kang, J. Pelliciari, A. Frano, N. Breznay, E. Schierle, E. Weschke, R. Sutarto, F. He, P. Shafer, E. Arenholz, M. Chen, K. Zhang, A. Ruiz, Z. Hao, S. Lewin, J. Analytis, Y. Krockenberger, H. Yamamoto, T. Das, **R. Comin**. Evolution of charge order topology across a magnetic phase transition in cuprate superconductors, *Nature Physics* **15**, 335 (2019). DOI: 10.1038/s41567-018-0401-8
35. J. Li, **R. Comin**. Putting the gap on the map, *Nature Physics* **15**, 736 (2019). DOI: 10.1038/s41567-019-0513-9
36. J. Li, J. Pelliciari, C. Mazzoli, S. Catalano, F. Simmons, J. T. Sadowski, A. Levitan, M. Gibert, E. Carlson, J.-M. Triscone, S. Wilkins, **R. Comin**. Scale-invariant magnetic textures in the strongly correlated oxide NdNiO₃, *Nature Communications* **10**, 4568 (2019). DOI: 10.1038/s41467-019-12502-0
37. M. Kang, J. Pelliciari, Y. Krockenberger, J. Li, D. E. McNally, E. Paris, R. Liang, W. N. Hardy, D. A. Bonn, H. Yamamoto, T. Schmitt, **R. Comin**. Resolving the nature of electronic excitations in resonant inelastic X-ray scattering. *Physical Review B* **99**, 045105 (2019). DOI: 10.1103/PhysRevB.99.045105
38. Z. H. Zhu, J. Stremper, R. R. Rao, C. A. Occhialini, J. Pelliciari, Y. Choi, T. Kawaguchi, H. You, J. F. Mitchell, Y. Shao-Horn, **R. Comin**. Anomalous Antiferromagnetism in Metallic RuO₂ Determined by Resonant X-ray Scattering. *Physical Review Letters* **122**, 017202 (2019). DOI: 10.1103/PhysRevLett.122.017202
39. J. Pelliciari and **R. Comin**. Charge crystallization in a Fermi liquid. *Nature Materials* **17**, 661 (2018). DOI:10.1038/s41563-018-0139-9

40. L. Ye*, M. Kang*, J. Liu, F. von Cube, C. R. Wicker, T. Suzuki, C. Jozwiak, A. Bostwick, E. Rotenberg, D. C. Bell, L. Fu, **R. Comin**, J. G. Checkelsky. Massive Dirac fermions in a ferromagnetic kagome metal. *Nature* **555**, 638 (2018). DOI:10.1038/nature25987

Invited Presentations

1. Quantum geometry and quantum materials, Office of the Undersecretary of Defense for Research and Engineering, Basic Research Office Speaker Forum, 2025.
2. The Magnetic Flip-Side: Exploring Altermagnetism, Army Research Lab webinar, 2025.
3. Electrical Switching of an Odd-Parity ‘Altermagnet’, MRS Spring 2025 – QT02 symposium, 2025.
4. p-wave magnetism in spin spiral magnets, International Workshop on Unconventional Magnetism in Quantum Materials, 2025.
5. Quantum geometry and quantum materials, quantum café @ European Commission, 2025.
6. Charge-density-waves in a magnetic insulating cuprate, FisMat 2025.
7. Switchable p-wave magnetism, Let’s give it a spin! workshop, 2025.
8. Switchable p-wave magnetism, JGU-Mainz seminar, 2025.
9. An odd-parity noncollinear 'altermagnet', Würzburg ToCoTronics Colloquium, 2025.
10. Correlation physics from lattice-driven flat bands, MPI-FKF seminar, 2025.
11. Switchable p-wave magnetism, KIT – IQMT seminar, 2025.
12. Switchable p-wave magnetism, NTNU CMP seminar, 2025.
13. Electrical Switching of an Odd-Parity ‘Altermagnet’, MRS Spring 2025.
14. Measurement of the quantum geometry in solids, Center for Ultracold Atoms seminar, 2025.
15. Switchable p-wave magnetism, Brainstorming Workshop Roadmap for Altermagnetism, 2025.
16. Fermiology and electronic symmetry breaking in AV3Sb5 kagome metals, Electronic Orders in Kagome Metals, 2024.
17. Correlation physics from lattice-driven flat bands, ct.qmat 2024.
18. Electrical switching of an odd-parity ‘altermagnet’, Rutgers CMP seminar, 2024.
19. Correlated flat bands in line-graph lattices, Kagome off-scale, 2024.
20. Correlated electron phenomena from electronic flat bands, ISTA Quantum Seminar, 2024.
21. Electronic flat bands in geometrically frustrated lattices, FAU Erlangen Physics Colloquium, 2024.
22. Voltage switching of chirality in a van der Waals multiferroic, International Conference on Magnetism, 2024.

23. Flat bands, quantum geometry, and ARPES, Quantum Spintronics, 2024.
24. Chirality switching in a vdW multiferroic, New Insights into Quantum Materials: Scattering, Other Probes, and Theory, 2024.
25. X-ray science for 2D quantum nanomaterials, Center for Functional Nanomaterials colloquium, 2024.
26. Flat bands and correlation physics, Center for Computational Quantum Physics Quantum Café, 2024.
27. A type-II multiferroic in two dimensions, 14th APCTP workshop on multiferroics, 2023.
28. Fermiology and electronic symmetry breaking in kagome metals, Penn State Condensed Matter Physics seminar, 2023.
29. Single-shot coherent imaging with randomized light, Linear Coherent Light Source Users' Meeting, 2023.
30. A type-II multiferroic in two dimensions, CMD30 FisMat International Conference, 2023.
31. Fermiology of the 2D Kagome Lattice, CMD30 FisMat International Conference, 2023.
32. Fermiology and electronic symmetry breaking in kagome metals, TU Wien Institute of Solid-State Physics seminar, 2023.
33. A type-II multiferroic in two dimensions, Low-Energy Electrodynamics in Solids International Conference, 2023.
34. Fermiology and electronic symmetry breaking in kagome metals, U. Würzburg ToCoTronics Colloquium, 2023.
35. Electronic topology and symmetry breaking in kagome metals, Control & Dynamics in Quantum Materials (CRC 1238) International Conference, 2023.
36. Fermiology and electronic symmetry breaking in AV₃Sb₅ kagome metals, UCLA Condensed Matter Physics seminar, 2023.
37. A type-II multiferroic in two dimensions, American Physical Society March Meeting, 2023.
38. Fermiology of the 2D kagome lattice, Harvard Physics colloquium, 2022.
39. Fermiology of the 2D kagome lattice, Boston College Physics colloquium, 2022.
40. Fermiology of the 2D kagome lattice, Canadian Institute for Advanced Research Quantum Materials Spring meeting, 2022.
41. Fermiology of the 2D kagome lattice, Oak Ridge National Lab Quantum Seminar, 2022.
42. Fermiology of the 2D kagome lattice, Princeton Condensed Matter Seminar, 2022.
43. Fermiology of the 2D kagome lattice, NYU Center for Quantum Phenomena Seminar, 2022.
44. A type-II multiferroic in two dimensions, TWEET Seminar Series, CNR-SPIN, 2022.

45. Topological physics and flat bands in the 2D kagome network, Center for the Advancement of Topological Semimetal Annual Meeting, 2021.
46. Charge-density-waves in a magnetic insulating cuprate, University of Minnesota Condensed Matter Seminar, 2021.
47. Topological physics and strong correlations in the 2D kagome network, Texas A&M University Condensed Matter Seminar, 2021.
48. Topological physics and strong correlations in the 2D kagome network, Rice University Condensed Matter Seminar, 2021.
49. Twofold van Hove singularity in topological kagome superconductor CsV₃Sb₅, Workshop on correlated and topological states in kagome metals, 2021.
50. Charge-density-waves in a magnetic insulating cuprate, Workshop on Resonant Inelastic and Elastic X-ray Scattering, 2021.
51. Single-frame mask-free imaging for spatiotemporal studies of advanced materials, Advanced Light Source Users' Meeting, 2021.
52. Topological physics and strong correlations in the 2D kagome network, New Generation Strongly Correlated Electron Systems international conference, 2021.
53. Topological Flat Bands in the 2D kagome network, Frontiers of Condensed Matter Physics Columbia, 2021.
54. Visualizing the birth (or at least infancy) of charge density waves, Karlsruhe Institute of Technology Condensed Matter Seminar, 2020.
55. Topological physics and flat bands in the 2D kagome network, RIKEN Center for Emergent Matter Science 5th topical meeting, 2020.
56. Topological physics and flat bands in the 2D kagome network, Korean Physical Society meeting, 2020.
57. Topological Flat Bands in the 2D kagome network, Condensed Matter Seminar at Tsung Dao Lee Institute at Shanghai Jiao Tong University, 2020.
58. X-ray imaging of complex materials at the nanoscale, Seminar at University College London, 2020.
59. Gragg coherent soft X-ray imaging of electronic orders, Advanced Light Source Innovation Forum, 2020.
60. Soft X-ray scattering and imaging of complex electronic materials, Photon Science Seminar, Paul Scherrer Institute, 2020.
61. Charge order in cuprates, Strange Metal Workshop at Lorentz Center, 2020.
62. Soft X ray scattering and imaging of quantum electronic solids, Future of Seeded Free Electron Lasers workshop, 2019.
63. Topological Physics in the 2D kagome network, Center for Integrated Quantum Matter Quantum Materials and Devices seminar, 2019.

64. Spatial (and temporal) correlations across the CDW transition in cuprates and tellurides, Advanced Light Source Users' Meeting, 2019.
65. Topological Dirac physics in magnetic kagome metals, International Workshop on Strong Correlations and Angle-Resolved Photoemission Spectroscopy (CORPES), 2019.
66. Soft X ray scattering and imaging of density wave orders in quantum solids, International Conference on Vacuum Ultraviolet and X-ray Physics, 2019.
67. Visualizing the birth of a CDW using resonant soft X ray scattering, Resonant Elastic X-ray Scattering conference (REXS), 2019.
68. Soft X-ray scattering and imaging of density-wave orders in quantum solids, Elettra - Sincrotrone Trieste seminar, 2019.
69. Coexistence of magnetic Neel and stripe order in Sr_2CrO_4 , American Physical Society March Meeting, 2019.
70. Emergent charge and spin textures in strongly interacting electron systems, Purdue University Physics Colloquium, 2019.
71. Resonant X-ray studies of strongly correlated oxides, CXFEL applications for quantum materials workshop, 2019.
72. Electronic properties of Ruddlesden-Popper chromium oxide perovskites, Electronic Materials and Applications conference, 2019.
73. Coherent soft X-ray scattering and imaging of electronic textures in quantum solids, UBC Quantum Matter Institute seminar, 2019.
74. Resonant X-ray studies of electronic orders in quantum solids, Stanford University Condensed Matter seminar, 2018.
75. Resonant X-ray studies of electronic orders in quantum solids, 12th International Conference on Ceramic Materials and Components for Energy and Environmental Applications, 2018.
76. Topology and magnetism in the kagome lattice, Low Energy Electrodynamics in Solids conference, 2018.
77. New opportunities for soft X-ray scattering at the nanoscale, Argonne National Lab Materials Science Division colloquium, 2018.
78. Resonant X-ray scattering at the nanoscale, National Synchrotron Light Source II Users' Meeting, 2018.
79. Resonant X-ray studies of electronic orders in quantum solids, Correlated Electron Systems Novel Developments workshop, 2018.
80. Emergent charge and spin textures in correlated oxides, New York State Section of the American Physical Society meeting, 2018.
81. New opportunities for soft X-ray scattering at the nanoscale, Canadian-Italian Workshop on Future Light Sources, 2018.
82. Resonant scattering studies of charge order in quantum solids, International Symposium on Superconductivity, 2017.

83. Resonant scattering studies of charge order in quantum solids, MIT-Skoltech Symposium on High-Temperature Superconductors, 2017.
84. Resonant scattering studies of charge order in quantum solids, Italian National Conference on the Physics of Matter (FisMat), 2017.
85. Resonant scattering studies of charge order in quantum solids, International School and Workshop on Electronic Crystals, 2017.
86. Lattice Dynamics in Organometallic Lead Halide Perovskites, Advanced Photon Source Users' Meeting, 2017.
87. Opportunities for soft x-ray scattering at the nanoscale, Advanced Light Source Upgrade workshop, 2017.
88. Resonant scattering studies of electronic orders in quantum materials, Brown University Physics Colloquium, 2016.
89. Photonic properties and applications of hybrid lead halide perovskites, Boston IEEE Photonics Society seminar, 2016.
90. Resonant x-ray scattering explorations of charge order and broken symmetries in underdoped cuprates, Swiss Workshop on Materials with Novel Electronic Properties, 2016.
91. Resonant x-ray scattering explorations of charge order and broken symmetries in underdoped cuprates, Gordon Research Conference on Correlated Electron Systems, 2016.
92. Resonant x-ray scattering explorations of charge order and broken symmetries in underdoped cuprates, Strongly Correlated Electron Systems (SCES), 2016.
93. Fundamental studies and new applications of hybrid lead halide perovskites, Energy, Materials, and Nanotechnology (EMN) Croatia Meeting, 2016.
94. Resonant scattering studies of electronic orders in quantum materials, UIUC Physics Colloquium, 2015.
95. Fundamental studies and new applications of hybrid lead halide perovskites, MIT-Harvard Center for Excitonics Seminar Series, 2015.
96. The microscopic structure of charge order in cuprates, International Conference on Inelastic X-ray Scattering (IXS), 2015.
97. Hybrid lead halide perovskite: a new platform for next-generation semiconductor technology, Quantum Innovators Workshop, 2015.
98. Charge order in cuprates: from hole to electron doping, International Conference on Electron Spectroscopy and Structure, 2015.
99. The microscopic structure of charge order in cuprates, American Physical Society March Meeting, 2015.
100. Resonant X-ray scattering studies of ordering phenomena in solids, MIT Condensed Matter Seminar, 2015.

101. Charge Order, Fermi-Arc Instability, and d-wave bond order in underdoped cuprates, Workshop on Novel Superconductors and Synchrotron Radiation, 2014.
102. Resonant X-ray scattering studies of ordering phenomena in solids, LASSP Seminar at Cornell University, 2014.
103. Charge Order, Fermi-Arc Instability, and d-wave bond order in underdoped cuprates, CIFAR – Quantum Materials Program Meeting, 2014.
104. Charge Order, Fermi-Arc Instability, and d-wave bond order in underdoped cuprates, Canadian Light Source Annual Users' Meeting, 2014.
105. Electron-lattice coupling and charge ordering phenomena in underdoped cuprates, Condensed Matter Seminar Series, University of British Columbia, 2014.
106. Correlated physics and charge-ordered ground states in 3d and 5d oxides, University of Toronto Condensed Matter Seminar, 2013.
107. Correlated physics and charge-ordered ground states in 3d and 5d oxides, LASSP Special Seminar at Cornell University, 2013.
108. Novel correlated physics in iridium-based oxides - the special case of Na₂IrO₃, The New Generation in Strongly Correlated Electron Systems (NGSCES) conference, 2013.
109. Novel correlated physics in iridium-based oxides - the special case of Na₂IrO₃, Université de Genève Condensed Matter Seminar, 2013.
110. Novel correlated physics in iridium-based oxides - the special case of Na₂IrO₃, EPFL Condensed Matter Seminar, 2013.
111. Novel correlated physics in iridium-based oxides - the special case of Na₂IrO₃, Gordon Research Seminar on Superconductivity, 2013.
112. Surface-bulk dichotomy in single-layered Bi-based cuprates, Elettra Sincrotrone Trieste Seminar Series, 2012.
113. Understanding the role of correlations in 5d transition metal oxides - an ARPES overview of Na₂IrO₃, UBC Condensed Matter Seminar Series, 2012.
114. Understanding the role of correlations in 5d transition metal oxides - an ARPES overview of Na₂IrO₃, Condensed Matter Seminar Series, Università Cattolica del Sacro Cuore, 2012.