

Research Publications

Hemant K. Mishra

Published

1. Shaowu Huang and Hemant K. Mishra. Majorization in some symplectic weak supermajorizations. *Linear Algebra and its Applications*, 703:1–10, 2024. <https://doi.org/10.1016/j.laa.2024.08.019>.
2. Hemant K. Mishra, Michael Nussbaum, and Mark M. Wilde. On the optimal error exponents for classical and quantum antidistinguishability. *Letters in Mathematical Physics*, 114(76), 2024. <https://doi.org/10.1007/s11005-024-01821-z>.
3. Hemant K. Mishra, Ludovico Lami, Prabha Mandayam, and Mark M. Wilde. Pretty good measurement for bosonic Gaussian ensembles. *International Journal of Quantum Information*, 22(5):2440010, 2024. <https://doi.org/10.1142/S0219749924400100>.
4. Gajendra Babu, and Hemant K. Mishra. Block perturbation of symplectic matrices in Williamson’s theorem. *Canadian Mathematical Bulletin*, 67(1):201–214, 2024. <https://doi.org/10.4153/S0008439523000620>.
5. Hemant K. Mishra, Samad Khabbazi Oskouei, and Mark M. Wilde. Optimal input states for quantifying the performance of continuous-variable unidirectional and bidirectional teleportation. *Physical Review A*, 107:062603, 2023. <https://link.aps.org/doi/10.1103/PhysRevA.107.062603>.
6. Tanvi Jain and Hemant K. Mishra. Derivatives of symplectic eigenvalues and a Lidskii type theorem. *Canadian Journal of Mathematics*, 74(2):457–485, 2022. <https://doi.org/10.4153/S0008414X2000084X>.
7. Hemant K. Mishra. First order sensitivity analysis of symplectic eigenvalues. *Linear Algebra and its Applications*, 604:324–345, 2020. <https://doi.org/10.1016/j.laa.2020.07.003>.

Preprints/under review

1. Rudra R. Kamat and Hemant K. Mishra. Simultaneous symplectic reduction of quadratic forms to normal forms. 2024. <https://arxiv.org/abs/2412.01492>.
2. Hemant K. Mishra. Equality in some symplectic eigenvalue inequalities. 2023. <https://arxiv.org/abs/2309.04562>.
3. Felix Leditzky, Hemant K. Mishra, Theshani Nuradha, and Mark M. Wilde. Multivariate fidelities. 2024. <https://arxiv.org/abs/2404.16101>.
4. Hemant K. Mishra. On generalization of Williamson’s theorem to real symmetric matrices. 2024. [arXiv:2408.04894](https://arxiv.org/abs/2408.04894).
5. Kaiyuan Ji, Hemant K. Mishra, Milan Mosonyi, and Mark M. Wilde. Barycentric bounds on the error exponents of quantum hypothesis exclusion. 2024. [arXiv:2407.13728](https://arxiv.org/abs/2407.13728).