

Publications

ARTICLES ACCEPTED OR PUBLISHED

- t.a. Gerhold M.; Pandey, S.; Shalit, O.; Solel, B.: Dilations of unitary tuples. Accepted for publication in *J. Lond. Math. Soc. (2)*, 29 pp., “early view”, [doi:10.1112/jlms.12491](https://doi.org/10.1112/jlms.12491).
- t.a. Gerhold M.; Shalit, O.: Dilations of q -Commuting Unitaries. Accepted for publication in *Int. Math. Res. Not.*, 15 pp., advance article rnaa093, [doi:10.1093/imrn/rnaa093](https://doi.org/10.1093/imrn/rnaa093).
- t.a. Gerhold, M.: Bimonotone Brownian Motion. Accepted for publication in *QP–PQ: Quantum Probab. White Noise Anal.*, 32, *Proceedings of QP 38, special issue dedicated to Prof. Accardi, Prof. Volovich and a memorial issue to Prof. Hida*, World Sci. Publ., Noboru Watanabe (Editor), 14 pp. Preprint: arxiv.org/abs/1708.03510.
- 2021 Gerhold M.; Shalit, O.: On the matrix range of random matrices. *J. Operator Theory* 85 (2021), no. 2, 527–545.
- 2020 Gerhold, M.; Skeide, M.: Interacting Fock Spaces and Subproduct Systems. *Infin. Dimens. Anal. Quantum Probab. Relat. Top.* 23, no. 3, 2050017, 53 pp., [doi:10.1142/S0219025720500174](https://doi.org/10.1142/S0219025720500174).
- 2020 Gerhold, M.; Skeide, M.: Subproduct Systems and Cartesian Systems: New Results on Factorial Languages and their Relations with Other Areas. *J. Stoch. Anal.* 1, no. 4, Art. 5, 21 pp., [doi:10.31390/josa.1.4.05](https://doi.org/10.31390/josa.1.4.05).
- 2017 Bichon, J.; Franz, U.; Gerhold, M.: Homological properties of quantum permutation algebras. *New York J. Math.* 23 (2017) 1671-1695, nyjm.albany.edu/j/2017/23-74.html.
- 2015 Franz U.; Gerhold M.; Thom A.: On the Lévy-Khinchin Decomposition of Generating Functionals. *Commun. Stoch. Anal.* 9 (2015), no. 4, 529–544, [doi:10.31390/cosa.9.4.06](https://doi.org/10.31390/cosa.9.4.06).
- 2015 Gerhold, M.; Lachs, S.: Classification and GNS-construction for general universal products. *Infin. Dimens. Anal. Quantum Probab. Relat. Top.* 18 (2015), no. 1, [doi:10.1142/S0219025715500046](https://doi.org/10.1142/S0219025715500046).
- 2012 Gerhold, M.; Kietzmann, S.; Lachs, S.: Additive deformations of braided Hopf algebras. *Noncommutative harmonic analysis with applications to probability III*, 175–191, Banach Center Publ., 96, Polish Acad. Sci. Inst. Math., Warsaw, 2012, [doi:10.4064/bc96-0-11](https://doi.org/10.4064/bc96-0-11).
- 2011 Gerhold, M.: Additive deformations of Hopf algebras. *J. Algebra* 339 (2011), 114–134, [doi:10.1016/j.jalgebra.2011.05.019](https://doi.org/10.1016/j.jalgebra.2011.05.019).

PREPRINT ARTICLES

- 2021 Gerhold, M.; Hasebe, T.; Ulrich, M.: Towards a Classification of Multi-Faced Independence: A Representation-Theoretic Approach, 44 pp.
Preprint at arxiv.org/abs/2111.07649.
- 2021 Gerhold, M.: Schoenberg correspondence for multifaced independence, 10 pp.
Preprint at arxiv.org/abs/2104.02985.
- 2016 Gerhold M.; Lachs, S.; Schürmann, M.: Categorical Lévy processes.
Preprint at arxiv.org/abs/1612.05139.

THESES

- 2015 Dissertation: "On several problems in the theory of comonoidal systems and subproduct systems"
Supervision: Michael Schürmann
Exterior report: Orr Shalit
- 2009 Diplome: "Quanten-Lévy-Prozesse auf Deformationen von Bialgebren"
Supervision: Michael Schürmann
Second report: Volkmar Liebscher