

## Publications in the period 01.01.2021 – 31.12.2021

1. Matsumoto K., Saad Eddin S.: An asymptotic formula for the  $2k$ -th power mean value of  $|L' + /L(1 + it_{o,x})|$ . In: *Journal of the Mathematical Society in Japan*, 73(3), pp. 781-814, 2021. [arXiv:1803.00495](#).
2. Kiuchi I., Pillichshammer F., Saad Eddin S.: On the multivariable generalization of Anderson-Apostol sums. In: *Far East Journal of Mathematical Sciences*, 130(1), pp. 1-24, 2021. [arXiv:1811.06022](#).
3. Inoue S., Saad Eddin S., Suriajaya A.I.: Stieltjes constants of L-functions in the extended Selberg class. In: *Ramanujan J.*, 55, pp. 609-621, 2021. [DOI:10.1007/s11139-021-00391-1](#)
4. Hinrichs A., Krieg D., Novak E., Prochno J., Ullrich M.: Random sections of ellipsoids and the power of random information. In: *Transactions of the AMS* 374 (2021), no. 12, pp. 8691-8713. [Link](#).
5. Krieg D., Ullrich M.: Function values are enough for L2-approximation. In: *Foundations of Computational Mathematics* 21 (2021), no. 4, pp. 1141-1151. [Link](#).
6. Krieg D., Ullrich M.: Function values are enough for L2-approximation: Part II. In: *J. Complexity* 66 (2021), no. 101569, p.14. [Link](#).
7. Ebert A., Kritzer P., Nuyens D., Osisiogu O.: Digit-by-digit and component-by-component constructions of lattice rules for periodic functions with unknown smoothness. In: *J. Complexity* 66, 101555, 2021. [arXiv:2001.02978v1](#)
8. Wiart, J., Wong, E.: An application of symbolic computation to quasi-Monte Carlo integration. In: *Mathematics and Computers in Simulation*, Bd. 182, S. 277-295, 2021. [arXiv:2006.06225v1](#)
9. Desmettre S., Wahl M., Zagst R.: Dynamic Surplus Optimization with Performance- and Index-Linked Liabilities, In: *European Actuarial Journal* (online), 2021. [DOI:10.1007/s13385-021-00292-z](#).
10. Kaltenböck L., Kiuchi I., Saad Eddin S. and Ueda M.: Sums of averages of gcd-sum functions II, In: *Results in Mathematics*, 76(43), 2021. [DOI: 10.1007/s00025-021-01357-x](#).
11. Hofer R.: Finding both, the continued fraction and the Laurent series expansion of golden ratio analogs in the field of formal power series. In: *Journal of Number Theory*, 223, pp. 168-194, 2021. [arXiv:2008.04518](#)
12. Kritzer P., Pillichshammer F., Wasilkowski G.W.: On quasi Monte Carlo methods in weighted ANOVA spaces, In: *Mathematics of Computation* 90, 1381--1406, 2021. [arXiv:2001.05765](#)
13. Pillichshammer F.: A note on Korobov lattice rules for integration of analytic functions, In: *J. Complexity*, 63,101524, 2021. [arXiv:2010.03286](#)
14. Sonnleitner M., Pillichshammer F.: On the relation of the spectral test to isotropic discrepancy and  $L_q$ -approximation in Sobolev spaces. In: *J. Complexity*, 67: 101576, 9 pp., 2021. [arXiv:2010.04522](#).

15. Desmettre S., Leobacher G., Rogers L.C.G.: Change of drift in one-dimensional diffusions, In: *Finance and Stochastics*, 25(2), pp. 359-381, 2021. <https://doi.org/10.1007/s00780-021-00451-w>.
16. Hinrichs A., Kritzinger R., Pillichshammer F.: Extreme and periodic L2 discrepancy of plane point sets, In: *Acta Arith.*, 199(2), pp. 163-198, 2021. [arXiv:2005.09933](https://arxiv.org/abs/2005.09933).
17. Christoph Aistleitner, Thomas Lachmann, Paolo Leonetti, Paolo Minelli: On the number of gaps of sequences with Poissonian Pair Correlations. In: *Discrete Mathematics*. Link: On the number of gaps of sequences with Poissonian pair correlations - ScienceDirect. 2021. [arXiv:1908.06292](https://arxiv.org/abs/1908.06292).
18. Hinrichs A., Prochno J., Vybiral J.: Gelfand numbers of embeddings of Schatten classes. In: *Mathematische Annalen* 380 (2021), no. 3-4, pp. 1563-1593. [Link](#).
19. Ebert A., Pillichshammer F.: Tractability of approximation in the weighted Korobov space in the worst-case setting -- a complete picture. In: *J. Complexity*, 67: 101571, 15pp., 2021. [arXiv:2102.01449](https://arxiv.org/abs/2102.01449).
20. Kritzinger R., Wiart J.: Improved dispersion bounds for modified Fibonacci lattices. In: *J. Complexity*, 63, 14 pp., 2021. [arXiv:2007.02297](https://arxiv.org/abs/2007.02297).
21. Kritzinger R.: Dispersion of digital (0,m,2) nets. In: *Monatshefte für Mathematik*, 195(1), pp. 155-171, 2021. [arXiv:2004.14760](https://arxiv.org/abs/2004.14760).
22. Dick J., Pillichshammer F.: Weighted integration over a hyperrectangle based on digital nets and sequences. In: *J. Comput. Appl. Math.*, 393: 113509, 25 pp., 2021. [arXiv:2009.06993](https://arxiv.org/abs/2009.06993).
23. Hofer R., Kaltenböck L.: Pair correlations of Halton and Niederreiter Sequences are not Poissonian, in *Monatsheft für Mathematik* 194, pp. 789-809, 2021. [Link](#).
24. Technau M., Zafeiropoulos A.: Metric results on summatory arithmetic functions on Beatty sets. In: *Acta Arith.*, 197(1), pp. 93 - 104, 2021. [arXiv:1907.06050](https://arxiv.org/abs/1907.06050).
25. Beltrán C., Etayo U., Marzo J., Ortega-Cerdá J.: A sequence of polynomials with optimal condition number. In: *J. Amer. Math. Soc.*, 34(1), pp. 219-244, 2021. [doi:10.1090/jams/956](https://doi.org/10.1090/jams/956).
26. Gómez A.-I., Gómez-Pérez D., and Pillichshammer F.: Secure pseudorandom bit generators and point sets with low star-discrepancy. In: *J. Comput. Appl. Math.*, 396: 113601, 8 pp., 2021. [arXiv:2004.14158](https://arxiv.org/abs/2004.14158).
27. Brunhuemer A., Larcher G., Larcher L.: Analysis of Option Trading Strategies Based on the Relation of Implied and Realized S&P500 Volatilities. *ACRN Journal of Finance and Risk Perspective*, Vol. 10, Special Issue 18th FRAP Conference, pp. 166-203, 2021. [Link](#).
28. Hinrichs A., Krieg D., Novak E., Vybiral J.: Lower bounds for the error of quadrature formulas for Hilbert spaces. In: *J. Complexity* 65 (2021), no. 101544, p. 20. [Link](#).
29. Etayo U.: A sharp Bombieri inequality, logarithmic energy and well conditioned polynomials. In: *Transactions of the American Mathematical Society*, 374, 7, pp. 5113-5129, 2021. [arXiv:1912.05521](https://arxiv.org/abs/1912.05521).
30. Ehler M., Etayo U., Gariboldi B., Gigante G., Peter T.: Asymptotically optimal cubature formulas on manifolds for prefixed weights. In: *J. Approx. Theory*, 271, 2021. <https://doi.org/10.1016/j.jat.2021.105632>.
31. Leobacher G., Steinicke A.: Existence, Uniqueness and Regularity of the Projection onto Differentiable Manifolds. In: *Ann. Glob. Anal. Geom.* 2021. [arXiv:1811.10578](https://arxiv.org/abs/1811.10578).

32. Anbar Meidl N., Stichtenoth H., Tutdere S.: Asymptotically good towers of function fields with small  $p$ -rank. In: *Finite Fields and their Applications*, 76., 2021., 101909, 13pp. PDF.
33. Ddamulira M.: Padovan numbers that are concatenations of two distinct repdigits. In. *Math. Slovaca*. 2021. [arXiv:2003.10705](https://arxiv.org/abs/2003.10705).