

Publications

Articles

1. Thomas Fink, Brigitte Forster-Heinlein, Florian Heinrich: *Rebricking frames and bases*. Journal of Mathematical Analysis and Applications, 2025, 544(2), 129051
2. Brigitte Forster-Heinlein, Jutta Mägdefrau: *Action Research in der Hochschullehre: Drei Beispiele aus dem Fach Mathematik*. Empirische Pädagogik, 37(3), Kap. 3 [digital], 2023, pp. 259–279
3. Paula Cerejeiras, Thomas Fink, Brigitte Forster, Uwe Kähler: *Shift-invariant spline subspaces of Sobolev spaces and their order of approximation*. Journal of Mathematical Analysis and Applications, 528(1), 2023. doi.org/10.1016/j.jmaa.2023.127444
4. Sima Caspari-Sadeghi, Elena Mille, Hella Epperlein, Brigitte Forster-Heinlein: *Stimulating Reflection through Self-Assessment: Certainty-based Marking (CBM) in Online Mathematics Learning*. Mathematics Teaching Research Journal online. Vol. 14 (2), 2022, pp. 145–156.
5. Florian Schwarz, Shabhrish Reddy Uddehal, Alexander Lodermeier, Eman Mohamadi Bagheri, Brigitte Forster-Heinlein, Stefan Becker: *Interaction of flow pattern and heat transfer in oscillating heat pipes for hot spot applications*. Applied Thermal Engineering, Vol. 196, Article 117334, 2021.
6. Sima Caspari, Brigitte Forster-Heinlein, Jutta Mägdefrau, Lena Bachl: *Student-generated Questions: Developing Mathematical Competence through Online-Assessment*. International Journal for the Scholarship of Teaching and Learning, Vol. 15 (1), Article 8, 2021.
7. Florian Heinrich and Brigitte Forster: *Lifting of quaternionic frames to higher dimensions with partial ridges*. Advances in Applied Clifford Analysis, Vol. 31, Article No. 12, 2021.
8. Peter Massopust, Brigitte Forster and Ole Christensen: *Fractional and Complex Pseudo-Splines and the Construction of Parseval Frames*. Applied Mathematics and Computation, Vol. 314, 2017, pp. 12–24
9. Andreas Schindele, Peter Massopust, and Brigitte Forster: *Multigrid Convergence for the MDCA-Curvature Estimator*. Journal of Mathematical Imaging and Vision, Vol. 57, 2017, pp. 423–438
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11. Ole Christensen, Brigitte Forster and Peter Massopust: *Directional time-frequency analysis via continuous frames*. Bull. Aust. Math. Soc., Vol. 92, 2015, pp. 268–281.
12. Brigitte Forster, Ramūnas Garunkštis, Peter Massopust and Jörn Steuding: *Complex B-splines and Hurwitz zeta functions*, LMS J. Comput. Math. 16, 2013, pp. 61–77.
13. Brigitte Forster, Peter Massopust, and Thomas Übelacker: *Periodic Splines of Complex Order*. Numerical Functional Analysis and Optimization, Special issue on Operator Algebra and Representation Theory: Frames, Wavelets and Fractals, Vol. 33 (7-9), 2012, pp. 989–1004.

14. Brigitte Forster and Peter Massopust: Splines of Complex Order: Fourier, Filters and Fractional Derivatives. *Sampling Theory in Signal and Image Processing*, Vol. 10, No. 1-2, 2011, pp. 89–110.
15. Dimitri Van De Ville, Brigitte Forster, Michael Unser and Thierry Blu: *Analytical Footprints: Compact Representation of Elementary Singularities in Wavelet Bases*. *IEEE Trans. Signal Proc.*, Vol. 58, Issue 12, Dec. 2010, pp. 6105–6118.
16. Stefan Held, Martin Storath, Peter Massopust, Brigitte Forster: *Steerable wavelet frames based on the Riesz transform*. *IEEE Transactions on Image Processing*, Vol. 19, No. 3, 2010, pp. 653–667.
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22. Brigitte Forster: *Approximation in Smirnov spaces: Direct and Inverse Theorems*. *Constructive Approximation*, Volume 26, Number 1, June 2007, pp. 49–64.
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3. Thomas Fink, Brigitte Forster, Florian Heinrich: Gabor’s “complex signal” revisited: Complexifying frames and bases. Proc. Appl. Math. Mech. (PAMM), 2023.
<http://doi.org/10.1002/pamm.202300155>
4. Brigitte Forster-Heinlein, Hella Epperlein, Elena Mille, Sima Caspari-Sadeghi: Three easy ways to foster self-assessment and learning in higher STEM education. 2023 IEEE 2nd German Education Conference (GECon), Berlin, Germany, 2023, pp. 1–6.
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5. Sima Caspari-Sadeghi, Elena Mille, Hella Epperlein, Brigitte Forster-Heinlein: Democratizing Assessment for Sustainable Learning in Mathematics Instruction: Giving Students Agency in Classroom Research. 2023 IEEE Global Engineering Education Conference Educon. Kuwait. DOI: 10.1109/EDUCON54358.2023.10125218.
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7. Christoph Praschl, Philipp Auersperg-Castell, Brigitte Forster-Heinlein and Gerald A. Zwettler: Segmentation and Multi-Facet Classification of Individual Logs in Wooden Piles. Extended Abstract. In: EUROCAST 2022 – Computer Aided Systems Theory, 2022.
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(DOI: <https://doi.org/10.5281/zenodo.5387708>)
10. Alea Strobel, Brigitte Forster and Virginie Uhlmann: A Comparison of curvature estimation methods for bioimaging. (Extended Abstract) IEEE International Symposium on Biomedical Imaging ISBI, Nice, 2021.

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5. Brigitte Forster: *Five good reasons for complex-valued transforms in image processing*. (Invited contribution.) In: G. Schmeißer and A. Zayed (Eds.): New Perspectives on Approximation and Sampling Theory – Festschrift in honor of Paul Butzer’s 85th birthday. Birkhäuser. 2014.
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1. Thomas Fink, Brigitte Forster-Heinlein, Florian Heinrich und Moritz Proell: *Rebricking Wavelets*. Submitted to Complex Analysis and Operator Theory, 2024.
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