

## List of publications

### PREPRINTS

- [1] P. Casgrain, M. Larsson, J. Ziegel. Anytime-valid sequential testing for elicitable functionals via supermartingales. *Preprint*, 2022. Available at [arXiv:2204.05680](https://arxiv.org/abs/2204.05680).
- [2] T. Dimitriadis, L. Dümbgen, A. Henzi, M. Puke, J. Ziegel. Honest calibration assessment for binary outcome predictions. *Preprint*, 2022. Available at [arXiv:2203.04065](https://arxiv.org/abs/2203.04065).
- [3] S. Allen, D. Ginsbourger, J. Ziegel. Evaluating forecasts for high-impact events using transformed kernel scores. *Preprint*, 2022. Available at [arXiv:2202.12732](https://arxiv.org/abs/2202.12732).
- [4] S. Arnold, H. El Barmi, H. Mukerjee, J. Ziegel. Estimating several survival functions under uniform stochastic ordering. *Preprint*, 2022.
- [5] S. Arnold, A. Henzi, J. F. Ziegel. Sequentially valid tests for forecast calibration. *Preprint*, 2021. Available at [arXiv:2109.11761](https://arxiv.org/abs/2109.11761).
- [6] A. Mühlemann, J. F. Ziegel. Isotonic regression for functionals of elicitation complexity greater than one. *Preprint*, 2021. Available at [arXiv:2106.15369](https://arxiv.org/abs/2106.15369). Revision requested from *Electronic Journal of Statistics*.
- [7] T. Dimitriadis, T. Fissler, J. F. Ziegel. The efficiency gap. *Preprint*, 2020. Available at [arXiv:2010.14146](https://arxiv.org/abs/2010.14146).

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- [8] A. Henzi, J. F. Ziegel. Valid sequential inference on probability forecast performance. *Biometrika*, to appear, 2022+. Preprint available at [arXiv:2103.08402](https://arxiv.org/abs/2103.08402).
- [9] A. I. Jordan, A. Mühlemann, J. F. Ziegel. Characterizing the optimal solutions to the isotonic regression problem for identifiable functionals. *Annals of the Institute of Statistical Mathematics*, to appear, 2022+. Preprint available at [arXiv:1904.04761](https://arxiv.org/abs/1904.04761).
- [10] A. Henzi, G.-R. Kleger, J. F. Ziegel. Distributional (single) index models. *Journal of the American Statistical Association*, to appear, 2022+. Preprint available at [arXiv:2006.09219](https://arxiv.org/abs/2006.09219).
- [11] T. Fissler, J. F. Ziegel. On the elicibility of Range Value at Risk. *Statistics & Risk Modeling*, 38:25–46, 2021.
- [12] A. Henzi, J. F. Ziegel, T. Gneiting. Isotonic distributional regression. *Journal of the Royal Statistical Society: Series B*, 83:963–993, 2021.
- [13] R. Wang, J. F. Ziegel. Scenario-based risk evaluation. *Finance and Stochastics*, 25:725–756, 2021.
- [14] M. Hofert, J. F. Ziegel. Matrix-tilted Archimedean copulas. *Risks*, 9(4):68, 2021.
- [15] A. Henzi, G.-R. Kleger, Matthias P. Hilty and P. D. Wendel Garcia on behalf of RISC-19-ICU Investigators for Switzerland, J. F. Ziegel. Probabilistic analysis of COVID-19 patients' individual length of stay in Swiss intensive care units. *PLOS ONE*, 16(2):e0247265, 2021.
- [16] K. Whan, J. Zscheischler, A. I. Jordan, J. F. Ziegel. Novel multivariate quantile mapping methods for ensemble post-processing of medium-range forecasts. *Weather and Climate Extremes*, 32: 100310, 2021.
- [17] F. Krüger, J. F. Ziegel. Generic conditions for forecast dominance. *Journal of Business & Economic Statistics*, 39:972–983, 2021.

- [18] I. Steinwart, J. F. Ziegel. Strictly proper kernel scores and characteristic kernels on compact spaces. *Applied and Computational Harmonic Analysis*, 51:510–542, 2021.
- [19] S. Arnold, I. Molchanov, J. F. Ziegel. Bivariate distributions with ordered marginals. *Journal of Multivariate Analysis*, 177:104585, 2020.
- [20] J. F. Ziegel, F. Krüger, A. Jordan, F. Fasciati. Robust Forecast Evaluation of Expected Shortfall. *Journal of Financial Econometrics*, 18:95–120, 2020.
- [21] N. Y. Larsen, J. F. Ziegel, J. R. Nyengaard, E. B. Vedel Jensen. Stereological estimation of particle shape from vertical sections. *Journal of Microscopy*, 275:183–194, 2019.
- [22] T. Fissler, J. F. Ziegel. Order-Sensitivity and Equivariance of Scoring Functions. *Electronic Journal of Statistics*, 13:1166–1211, 2019.
- [23] A. Patton, J. F. Ziegel, R. Chen. Dynamic Semiparametric Models for Expected Shortfall (and Value-at-Risk). *Journal of Econometrics*, 211:388–413, 2019.
- [24] N. Nolde, J. F. Ziegel. Elicitability and backtesting: Perspectives for banking regulation. *Annals of Applied Statistics*, 11:1833–1874, 2017, discussion paper. Rejoinder, *Annals of Applied Statistics*, 11:1901–1911, 2017.
- [25] C. Strähl, J. F. Ziegel. Cross-calibration of probabilistic forecasts. *Electronic Journal of Statistics*, 11:608–639, 2017.
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- [35] M. Podolskij, C. Schmidt, J. F. Ziegel. Limit theorems for non-degenerate U-statistics of continuous semimartingales. *Annals of Applied Probability*, 24:2491–2526, 2014.
- [36] E. B. Vedel Jensen, J. F. Ziegel. Local stereology of tensors of convex bodies. *Methodology & Computing in Applied Probability*, 16:263–282, 2014. Special Issue: S4G Stochastic Geometry, Stereology and Spatial Statistics.

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- [45] J. Ziegel, M. Kiderlen. Estimation of surface area and surface area measure of three-dimensional sets from digitizations. *Image and Vision Computing*, 28:64–77, 2010.

## BOOK CHAPTERS

- [46] A. Kousholt, J. F. Ziegel, M. Kiderlen, E. B. Vedel Jensen. Stereological estimation of mean particle volume tensors in  $\mathbb{R}^3$  from vertical sections. In: *Tensor Valuations and their applications in Stochastic Geometry and Imaging*, Editors: M. Kiderlen, E. B. Vedel Jensen. Springer Lecture Notes in Mathematics, Volume 2177, pages 423–434, 2017.

## OTHER PUBLICATIONS

- [47] J. F. Ziegel. Contribution to the discussion of “Of quantiles and expectiles: consistent scoring functions, Choquet representations and forecast rankings” by Werner Ehm, Tilmann Gneiting, Alexander Jordan and Fabian Krüger. *Journal of the Royal Statistical Society: Series B*, 78: 505–562, 2016.
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- [49] J. F. Ziegel. Copula calibration. *Oberwolfach Reports*, 12:1091–1094, 2015. Workshop: Copulae: On the Crossroads of Mathematics and Economics. Organized by: Xiaohong Chen, Wolfgang Karl Härdle, Piotr Jaworski and Johanna G. Nešlehová.
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**WORKING PAPERS AND TECHNICAL REPORTS**

- [51] T. Dimitriadis, A. Henzi, M. Puke, J. Ziegel. A safe Hosmer-Lemeshow test. *Working paper*, 2022. Available at [arXiv:2203.00426](https://arxiv.org/abs/2203.00426).
- [52] C. Strähl, J. F. Ziegel, L. Dümbgen. Local estimation of a multivariate density and its derivatives. *Working paper*, 2018. Available at [arXiv:1812.09322](https://arxiv.org/abs/1812.09322).
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**THESES**

- [56] J. Ziegel. *Stereological analysis of spatial structures*. PhD thesis, ETH Zurich, Switzerland, 2010.
- [57] J. Ziegel. *Rectifiable sets in metric spaces of curvature bounded above*. Diplom thesis, ETH Zurich, Switzerland, 2006.