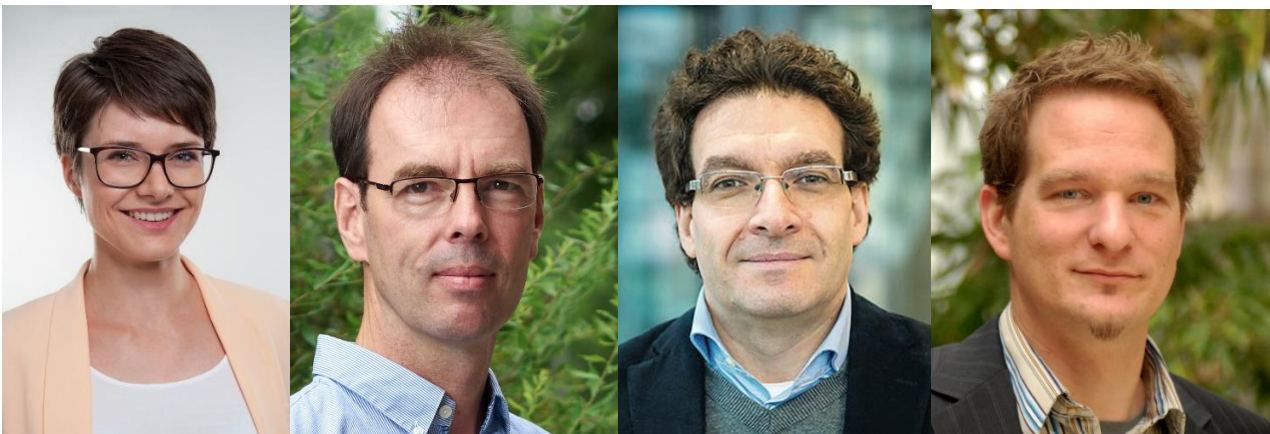


## Results of the STAHY Best Paper Award 2018

The STAHY Best Paper Award 2018 is assigned to:

- *Anneli Guthke (geb. Schöniger)*, Universität Stuttgart, Department of Stochastic Simulation and Safety Research for Hydrosystems (IWS/SRC SimTech), Stuttgart, Germany
- *Thomas Wöhling*, Technische Universität Dresden, Institut für Hydrologie and Meteorologie, Germany
- *Luis Samaniego*, Helmholtz Zentrum für Umweltforschung, Leipzig, Germany
- *Wolfgang Nowak*, Universität Stuttgart, Department of Stochastic Simulation and Safety Research for Hydrosystems (IWS/SRC SimTech), Stuttgart, Germany



*Anneli Schöniger*

*Thomas Wöhling*

*Luis Samaniego*

*Wolfgang Nowak*

for the paper:

**Schöniger, A., Wöhling, T., Samaniego, L., Nowak, W. (2014). "Model selection on solid ground: Rigorous comparison of nine ways to evaluate Bayesian model evidence", *Water Resources Research*, 50, 12, 9484-9513, doi:10.1002/2014WR016062.**

The STAHY Best Paper Award 2018 will be assigned during the STAHY'18 Conference - Adelaide, 24-26 September 2018.

The STAHY Best Paper 2018 is the result of evaluation of the following 25 papers, proposed by the ICSH Officers and published in 2014-2015-2016, ordered by citations (SCOPUS database, excluding self-citations):

1. Wang, W. C., et al. (2015). "Improving Forecasting Accuracy of Annual Runoff Time Series Using ARIMA Based on EEMD Decomposition". *Water Resources Management* 29(8): 2655-2675. (cited 148 times)
2. Taormina, R. and K. W. Chau (2015). "Data-driven input variable selection for rainfall-runoff modeling using binary-coded particle swarm optimization and Extreme Learning Machines." *Journal of Hydrology* 529: 1617-1632. (cited 109 times)
3. Jongman, B., Hochrainer-Stigler, S., Feyen, L., Aerts, J.C.J.H., Mechler, R., Botzen, W.J.W., Bouwer, L.M., Pflug, G., Rojas, R., Ward, P.J. (2014). "Increasing stress on disaster-risk finance due to large floods". *Nature Climate Change*, 4 (4), pp. 264-268. (cited 98 times)
4. Madsen, H., Lawrence, D., Lang, M., Martinkova, M., Kjeldsen, T.R. (2014). "Review of trend analysis and climate change projections of extreme precipitation and floods in Europe", *Journal of Hydrology* 519(PD), pp. 3634-3650. (cited 97 times)

5. Tehrany, M.S., Pradhan, B., Jebur, M.N. (2014). "Flood susceptibility mapping using a novel ensemble weights-of-evidence and support vector machine models in GIS." *Journal of Hydrology* 512: 332-343. (cited 77 times)
6. Alfieri, L., Burek, P., Feyen, L., Forzieri, G. (2015). "Global warming increases the frequency of river floods in Europe", *Hydrology and Earth System Sciences* 19(5), pp. 2247-2260. (cited 73 times)
7. Serinaldi, F., Kilsby, C.G. (2015). "Stationarity is undead: Uncertainty dominates the distribution of extremes", *Advances in Water Resources* 77, pp. 17-36. (cited 70 times)
8. Montanari, A., Koutsoyiannis, D. (2014). "Modeling and mitigating natural hazards: Stationarity is immortal!" *Water Resources Research* 50(12), pp. 9748-9756. (cited 54 times)
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10. Read, L.K., Vogel, R.M. (2015). "Reliability, return periods, and risk under nonstationarity", *Water Resources Research*, 51, 8, 6381-6398, 10.1002/2015WR017089. (cited 37 times)
11. Kjeldsen, T. R., Macdonald, N., Lang, M., Mediero, L., Albuquerque, T., Bogdanowicz, E., ... & Gül, G. O. (2014). "Documentary evidence of past floods in Europe and their utility in flood frequency estimation". *Journal of Hydrology*, 517, 963-973. (cited 36 times)
12. Coxon, G., Freer, J., Westerberg, I.K., Wagener, T., Woods, R., Smith, P.J. (2015). "A novel framework for discharge uncertainty quantification applied to 500 UK gauging stations", *Water Resources Research*, 51, 7, 5531-5546, 10.1002/2014WR016532. (cited 36 times)
13. Rajsekhar, D., Singh, V.P., Mishra, A.K. (2015). "Multivariate drought index: An information theory based approach for integrated drought assessment." *Journal of Hydrology* 526: 164-182. (cited 34 times)
14. Berndt, C., Rabiei, E., Haberlandt, U. (2014). "Geostatistical merging of rain gauge and radar data for high temporal resolutions and various station density scenarios." *Journal of Hydrology* 508: 88-101. (cited 34 times)
15. Falter, D., Schröter, K., Dung, N.V., Vorogushyn, S., Kreibich, H., Hundecha, Y., Apel, H., Merz, B. (2015). "Spatially coherent flood risk assessment based on long-term continuous simulation with a coupled model chain", *Journal of Hydrology*, 524, 182-193, 10.1016/j.jhydrol.2015.02.021. (cited 29 times)
16. Vormoor K, Lawrence D, Heistermann M, Bronstert A (2015). "Climate change impacts on the seasonality and generation processes of floods—projections and uncertainties for catchments with mixed snowmelt/rainfall regimes". *Hydrology and Earth System Sciences* 19:913-931. doi: 10.5194/hess-19-913-2015. (cited 24 times)
17. Madadgar, S., Moradkhani, H. (2014). "Improved Bayesian multimodeling: Integration of copulas and Bayesian model averaging", *Water Resources Research*, 50, 12, 9586-9603, 10.1002/2014WR015965. (cited 19 time)
18. Laaha, G., Skøien, J.O., Blöschl, G. (2014). "Spatial prediction on river networks: Comparison of top-kriging with regional regression", *Hydrological Processes* 28(2), pp. 315-324. (cited 19 times)
19. Schöniger, A., Wöhling, T., Samaniego, L., Nowak, W. (2014). "Model selection on solid ground: Rigorous comparison of nine ways to evaluate Bayesian model evidence", *Water Resources Research*, 50, 12, 9484-9513, 10.1002/2014WR016062. (cited 18 times)
20. Wang, D., Liu, D.F., Ding H., Singh, V.P., Wang, Y.K., Zeng, X.K., Wu, J.C., Wang, L.C. (2016). "A cloud model-based approach for water quality assessment". *Environmental Research* 148: 24-35. (cited 17 times)
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24. Wang, D., Singh, V.P., Shang, X.S., Ding, H., Wu, J.C., Wang, L.C., Zou, X.Q., Chen Y.F., Chen, X., Wang, S.C, and Wang, Z.L. (2014). "Sample entropy-based adaptive wavelet de-noising approach for meteorologic and hydrologic time series". *Journal of Geophysical Research: Atmospheres* 119, 8726-8740. doi:10.1002/2014JD021869. (cited 8 times)
25. Zhang, F., Ahmad, S., Zhang, H., (...), Feng, X., Li, L. (2016). "Simulating low and high streamflow driven by snowmelt in an insufficiently gauged alpine basin", *Stochastic Environmental Research and Risk Assessment*, 30(1), pp. 59-75. (cited 4 times)