

## Publikationen

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### Preprints:

N. Sapountzoglou, A. Zimmermann. Convergence rates for the finite volume scheme of the stochastic heat equation (2024). arXiv:2404.05655

K. Schmitz, A. Zimmermann. Well-posedness of stochastic evolution equations with Hölder continuous noise (2024). arXiv:2403.11917

N. Sapountzoglou, Y. Tahraoui, G. Vallet, A. Zimmermann. Stochastic pseudomonotone parabolic obstacle problem: well-posedness & Lewy-Stampacchia's inequalities (2023). arXiv:2305.16090.

C. Bauzet, K. Schmitz, A. Zimmermann. On a finite-volume approximation of a diffusion-convection equation with a multiplicative stochastic force (2023). arXiv:2304.02259.

A. Zimmermann. On a pseudomonotone evolution equation with multiplicative noise. Schriftenreihe der Fakultät für Mathematik Nr. 808. Universität Duisburg-Essen (2016).

A. Zimmermann. Martingale solutions for a pseudomonotone evolution equation with multiplicative noise. Schriftenreihe der Fakultät für Mathematik Nr. 802. Universität Duisburg-Essen (2016).

### Research articles and conference proceedings (peer-reviewed):

C. Bauzet, F. Nabet, K. Schmitz, A. Zimmermann (2023). Finite Volume Approximations for Non-linear Parabolic Problems with Stochastic Forcing. In: Finite Volumes for Complex Applications X–Volume 1, Elliptic and Parabolic Problems. FVCA 2023. Springer Proceedings in Mathematics & Statistics, vol 432. Springer, Cham. <https://doi.org/10.1007/978-3-031-40864-9>

C. Bauzet, F. Nabet, K. Schmitz, A. Zimmermann. Convergence of a finite-volume scheme for a heat equation with a multiplicative Lipschitz noise. ESAIM: M2AN 57 (2023) 745–783. <https://doi.org/10.1051/m2an/2022087>

K. Schmitz, A. Zimmermann. The stochastic  $p$ -Laplace equation on  $\mathbb{R}^d$  (2022). Stoch. Anal. Appl. doi: 10.1080/07362994.2022.2091600

N. Sapountzoglou, A. Zimmermann. Renormalized solutions for stochastic  $p$ -Laplace equations with  $L^1$ -initial data: The multiplicative case (2022). Discrete Contin. Dyn. Syst. 42 (2022), no. 8, 3979–4002.

N. Grossekemper, P. Wittbold, A. Zimmermann. Entropy Solutions of Doubly Nonlinear Fractional Laplace Equations. Results Math. 76 (2021), no. 4, Paper No. 195, 26 pp.

C. Bauzet, F. Lebon, A.A. Maitlo, A. Zimmermann. Well-posedness for the coupling of a random heat equation with a multiplicative stochastic Barenblatt equation. Stoch. Anal. Appl. 39 (2021), no. 6, 1095–1129.

N. Sapountzoglou, A. Zimmermann. Well-posedness of renormalized solutions for a stochastic  $p$ -Laplace equation with  $L^1$ -initial data. Discrete Cont. Dyn. Sys. 41 (2021), no. 5, 2341–2376.

G. Vallet, A. Zimmermann. Well-posedness for nonlinear SPDEs with strongly continuous perturbation. Proc. Roy. Soc. Edinburgh: Sect. A 151 (2021), no. 1, 265–295.

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- N. Sapountzoglou, P. Wittbold, A. Zimmermann. On a doubly nonlinear PDE with stochastic perturbation. Stoch. Partial Differ. Equ. Anal. Comput. 7 (2019), no. 2, 297–330.
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