

Publication List

Peer-reviewed Articles (published - chronological)

- [1] Adam, R., **Kogler, M. L.**, & Scholger, M. (2023). Aufwind in der Berichterstattung zum Klimaschutz.: Langfristige Entwicklung von Themen und Stimmungsbildern in österreichischen Zeitungen. *Zeitschrift für digitale Geisteswissenschaften*. Advance online publication.
https://doi.org/10.17175/2023_006
- [2] **Kogler, M. L.**, Thaller, A., & Reisinger, D. (2023). Public Acceptance of Green Mobility Policies: An Agent-Based Model. In F. Squazzoni (Ed.), *Springer Proceedings in Complexity, Advances in Social Simulation: Proceedings of the 17th Social Simulation Conference, European Social Simulation Association* (1st ed. 2023, pp. 511–523). Springer Nature Switzerland.
https://doi.org/10.1007/978-3-031-34920-1_41
- [3] Reisinger, D., **Kogler, M. L.**, & Jäger, G. (2023). On the Interplay of Gullibility, Plausibility, and Criticism: A Computational Model of Epistemic Vigilance. *Journal of Artificial Societies and Social Simulation*, 26(3), Article 8. <https://doi.org/10.18564/jasss.5136>
- [4] Adam, R., & **Kogler, M.** (2023). Tracking the evolution of climate protection discourse in Austrian newspapers. In Wolfgang Granigg (Chair), *Scientific Computing 2023: Conference Proceedings*. Symposium conducted at the meeting of Verlag der FH JOANNEUM Gesellschaft mbH, Alte Poststraße 149, A-8020 Graz.
- [5] Füllsack, M., Reisinger, D., Adam, R., **Kapeller, M.**, & Jäger, G. (2023). Predicting critical transitions in assortative spin-shifting networks. *PLOS ONE*, 18(2), e0275183.
<https://doi.org/10.1371/journal.pone.0275183>
- [6] Füllsack, M., Reisinger, D., **Kapeller, M.**, & Jäger, G. (2022). Early warning signals from the periphery: A model suggestion for the study of critical transitions. *Journal of Computational Social Science*, 5(1), 665–685. <https://doi.org/10.1007/s42001-021-00142-8>
- [7] Reisinger, D., Adam, R., **Kogler, M. L.**, Füllsack, M., & Jäger, G. (2022). Critical transitions in degree mixed networks: A discovery of forbidden tipping regions in networked spin systems. *PLOS ONE*, 17(11), e0277347. <https://doi.org/10.1371/journal.pone.0277347>
- [8] **Kapeller, M.L.**, Jäger, G., Füllsack, M. (2021). Social Norms and the Threat of Climate Change: An Agent-Based Model to Investigate Pro-Environmental Behaviour. In: Ahrweiler, P., Neumann, M. (eds) *Advances in Social Simulation*. ESSA 2019. Springer Proceedings in Complexity. Springer, Cham. https://doi.org/10.1007/978-3-030-61503-1_42
- [9] Füllsack, M., **Kapeller, M.**, Plakolb, S., & Jäger, G. (2021). Training LSTM-neural networks on early warning signals of declining cooperation in simulated repeated public good games. *MethodsX* 2215-0161, 7, 100920. <https://doi.org/10.1016/j.mex.2020.100920>
- [10] **Kapeller, M. L.**, & Jäger, G. (2020). Threat and Anxiety in the Climate Debate—An Agent-Based Model to Investigate Climate Scepticism and Pro-Environmental Behaviour. *Sustainability*, 12(5), 1823. <https://doi.org/10.3390/su12051823>

- [11] **Kapeller, M. L.**, Jäger, G., & Füllsack, M. (2020). Effects of Heterogeneous Strategy Composition on Cooperation in the Repeated Public Goods Game. *Advances in Social Simulation*, 247–257. https://doi.org/10.1007/978-3-030-34127-5_23
- [12] **Kapeller, M. L.**, Füllsack, M., & Jäger, G. (2019). Holiday Travel Behaviour and Correlated CO₂ Emissions—Modelling Trend and Future Scenarios for Austrian Tourists. *Sustainability*, 11(22), 6418. <https://doi.org/10.3390/su11226418>
- [13] **Kapeller, M. L.**, Jäger, G., & Füllsack, M. (2019). Homophily in networked agent-based models: A method to generate homophilic attribute distributions to improve upon random distribution approaches. *Computational Social Networks*, 6(1), 1–18. <https://doi.org/10.1186/s40649-019-0070-5>
- [14] Jäger, G., Hofer, C., **Kapeller, M.**, & Füllsack, M. (2017). Hidden early-warning signals in scale-free networks. *PLOS ONE*, 12(12), e0189853. <https://doi.org/10.1371/journal.pone.0189853>
- [15] Zakharova, A., **Kapeller, M.**, & Schöll, E. (2016). Amplitude chimeras and chimera death in dynamical networks. *Journal of Physics: Conference Series*, 727(1), 12018. <https://doi.org/10.1088/1742-6596/727/1/012018>
- [16] Schneider, I., **Kapeller, M.**, Loos, S., Zakharova, A., Fiedler, B., & Schöll, E. (2015). Stable and transient multicluster oscillation death in nonlocally coupled networks. *Physical Review. E, Statistical, Nonlinear, and Soft Matter Physics*, 92(5), 52915. <https://doi.org/10.1103/physreve.92.052915>
- [17] Zakharova, A., **Kapeller, M.**, & Schöll, E. (2014). Chimera death: Symmetry breaking in dynamical networks. *Physical Review Letters*, 112(15), 154101. <https://doi.org/10.1103/physrevlett.112.154101>

Peer-reviewed Articles (submitted, under review, accepted)

- [18] **Kogler, M. L.**, & Adam, R. (accepted). The Climate Debate Beyond Borders: A Critical Analysis of the Global Diversity of Climate Change Reporting Through an Austrian lens, *Proceedings of the Data Power Conference 2024*.
- [19] Tschofenig, F., Reisinger, D., Jäger, G., **Kogler, M. L.**, Adam, R., & Füllsack, M. (accepted). Stochastic Modeling of Cascade Dynamics: A unified approach for Simple and Complex Contagions across Homogeneous and Heterogeneous Threshold Distributions on Networks, *Physical Rev. Letter E*.
- [20] **Kogler, M. L.**, Thaller, A., & Posch, A. (submitted). Short-term emission reduction for leisure and business air travel: Assessment of taxes, regulations, sustainable aviation fuels and personal intentions, *Journal of Sustainable Tourism*.
- [21] **Kogler, M. L.**, (submitted). Understanding the Interplay of Anxiety and Opinion: Insights from Social Network Analysis across Direct Human Contact and Online Social Platforms. *Journal of Artificial Societies and Social Simulation*.
- [22] Reisinger, D., Tschofenig, F., Adam, R., **Kogler, M. L.**, Füllsack, M., Veider, F., & Jäger, G., (submitted) Patterns of stability in complex contagions. *Journal of Computational Social Science*.

- [23] Edlinger, M., **Kogler, M. L.**, & Ninaus, M. (submitted) Examining Eco-Games: Insights from Player Reviews on their Educational Value. *Conference proceedings of Future Education Conference 2024*

Book and Book Chapters

- [24] **Kogler, M. L.**, & Adam, R. (2023). *Mathematische Grundlagen für Umweltsystemwissenschaften: Einführung in die Differential- und Integralrechnung*. Springer Berlin Heidelberg; Springer Spektrum. <https://doi.org/10.1007/978-3-662-67371-3>
- [25] **Kogler, M. L.**, & Adam, R. (2023). Basiswissen und Notation. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 3–11). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_1
- [26] **Kogler, M. L.**, & Adam, R. (2023). Mengenlehre zu Funktionen. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 13–21). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_2
- [27] **Kogler, M. L.**, & Adam, R. (2023). Funktionen. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 25–72). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_3
- [28] **Kogler, M. L.**, & Adam, R. (2023). Grenzwerte und Stetigkeit. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften*. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_4
- [29] **Kogler, M. L.**, & Adam, R. (2023). Einführung in die Differentialrechnung. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 103–135). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_5
- [30] **Kogler, M. L.**, & Adam, R. (2023). Einführung in die Integralrechnung. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 137–165). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_6
- [31] **Kogler, M. L.**, & Adam, R. (2023). Mehrdimensionale Funktionen. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 167–189). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_7
- [32] **Kogler, M. L.**, & Adam, R. (2023). Partielles Differential. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 191–214). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_8
- [33] **Kogler, M. L.**, & Adam, R. (2023). Taylor-Näherung. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 217–228). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_9
- [34] **Kogler, M. L.**, & Adam, R. (2023). Koordinatensysteme. In M. L. Kogler & R. Adam (Eds.), *Mathematische Grundlagen für Umweltsystemwissenschaften* (pp. 229–242). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-67371-3_10

Theses

- [35] **Kapeller, M. L.** (2020). *Emergence of collective behaviour on complex networks:: simulation of agents and artificial societies with application focus on environmental decision-making* [Dissertation, University of Graz, Graz]. unipub.uni-graz.at. <http://unipub.uni-graz.at/obvugrhs/5335395>
- [36] **Kapeller, M.** (2014). Coherence-incoherence patterns in oscillator networks with symmetry-breaking nonlocal coupling. [Master thesis, Humboldt University Berlin, Berlin].
- [37] **Kapeller, M.** (2011). Technical details of a filter system for short-time neutron analysis. [Bachelor thesis, Technical University of Vienna, Vienna].

Software

- [38] **Kogler, M. L.** (2023). Anxiety-to-Approach Agent-Based Model (Version 1.0.0). *CoMSES Computational Model Library*. Retrieved from: <https://www.comses.net/codebases/ebffb5c4-badd-481e-b477-cf59324caf1/releases/1.0.0/>