

Matej Zečević

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STATISTICS including all publications and grouped by venue type + author position

	Venue Type	Author Position			Σ
		1 st	2 nd	Any	
Published	Conference	1	3	1	5
	Journal	3	1	0	4
	Workshop	3	0	0	3
	Bridge	1	1	2	4
	Σ Published	8	5	3	16
	Pre-Print	3	4	2	9
	Total Σ	11	9	5	25

PUBLICATIONS sorted by venue type and year

Conferences

- [1] N Dycke, M Zečević, I Kuznetsov, B Suess, K Kersting, I Gurevych, “STRICTA: Structured Reasoning in Critical Text Assessment for Peer Review and Beyond,” **To appear at the 63rd Annual Meeting of the Association for Computational Linguistics (ACL)**, 2024.
[OpenReview URL \(id: TUPGWVV0pA\)](#)
- [2] H Poonia, M Willig, Z Yu, M Zečević, K Kersting, D S Dhami, “ χ SPN: Characteristic Interventional Sum-Product Networks for Causal Inference in Hybrid Domains,” **Proceedings of the 40th Conference on Uncertainty in Artificial Intelligence (UAI)**, Proceedings of Machine Learning Research (PMLR) 244:3004-3020, 2024.
[OpenReview URL \(id: bttY3ppppX\)](#)
- [3] J Seng, M Zečević, D S Dhami, K Kersting, “Learning Large DAGs is Harder than you Think: Many Losses are Minimal for the Wrong DAG,” **The 12th International Conference on Learning Representations (ICLR)**, 2024.
[OpenReview URL \(id: gwbQ2YwLhD\)](#)
- [4] M Willig, M Zečević, D S Dhami, K Kersting, “Do Not Marginalize Mechanisms, Rather Consolidate!”, **Advances in Neural Information Processing Systems (NeurIPS) 36**, pp. 60947-60965, 2023.
[NeurIPS URL \(hash: bf73c283ed3108ee9f84da2e29bcc336\)](#)
- [5] M Zečević, D Dhami, A Karanam, S Natarajan, K Kersting, “Interventional sum-product networks: Causal inference with tractable probabilistic models,” **Advances in Neural Information Processing Systems (NeurIPS) 34**, pp. 15019-15031, 2021.
[NeurIPS URL \(hash: 7eb7eabbe9bd03c2fc99881d04da9cbd\)](#)

Journals

- [6] F P Busch, M Zečević, D S Dhami, K Kersting, “Elucidating Linear Programs by Neural Encodings,” **Frontiers in Artificial Intelligence**, Volume 8, 2025.
[Frontiers URL \(doi: 0.3389/frai.2025.1549085\)](#)
- [7] M Zečević, D S Dhami, K Kersting, “Structural Causal Models Reveal Confounder Bias in Linear Program Modelling,” *Journal Track of Asian Conference on Machine Learning (ACML): Springer Machine Learning*, Volume 113, pp. 1329–1349, 2024.
[Springer Nature URL \(doi: 10.1007/s10994-023-06431-9\)](#)
- [8] M Zečević*, M Willig*, D S Dhami, K Kersting, “Causal Parrots: Large Language Models May Talk Causality But Are Not Causal,” **Transactions in Machine Learning Research (TMLR)**, 2023.
[OpenReview URL \(id: tv46tCzs83\)](#)

- [9] M Zečević, D S Dhimi, K Kersting, “Not All Causal Inference is the Same,” **Transactions in Machine Learning Research (TMLR)**, 2023.
[OpenReview URL \(id: ySWQ6eXAKp\)](#)

Conference Workshops

- [10] M Zečević*, M Willig*, D S Dhimi, K Kersting, “Identifying Challenges for Generalizing to the Pearl Causal Hierarchy on Images,” **The 11th International Conference on Learning Representations (ICLR) 1st Workshop on Domain Generalization**, 2023.
[OpenReview URL \(id: QBgmo9BvnS\)](#)
- [11] M Willig*, M Zečević*, D S Dhimi, K Kersting, “Can Foundation Models Talk Causality?” **The 38th Conference on Uncertainty in Artificial Intelligence (UAI) Workshop on Causal Representation Learning**, 2022.
[OpenReview URL \(id: DbJXEqU0kaM\)](#)
- [12] M Zečević, F P Busch, D S Dhimi, K Kersting, “Finding Structure and Causality in Linear Programs,” **The 10th International Conference on Learning Representations (ICLR) 1st Workshop on Objects, Structure and Causality**, 2022.
[OpenReview URL \(id: rc8l8SOU9ec\)](#)

Conference Bridge Programs

- [13] M Zečević, M Willig, J Seng, F P Busch, “Continual Causal Abstractions,” **Proceedings of The First Association for the Advancement of Artificial Intelligence (AAAI) Bridge Program on Continual Causality**, Proceedings of Machine Learning Research (PMLR) 208:45-51, 2023.
[PMLR URL \(id: v208/zecevic23a\)](#)
- [14] J Seng, F P Busch, M Zečević, M Willig, “Treatment Effect Estimation to Guide Model Optimization in Continual Learning,” **Proceedings of The First Association for the Advancement of Artificial Intelligence (AAAI) Bridge Program on Continual Causality**, Proceedings of Machine Learning Research (PMLR) 208:38-44, 2023.
[PMLR URL \(id: v208/seng23a\)](#)
- [15] F P Busch, J Seng, M Willig, M Zečević, “Continually Updating Neural Causal Models,” **Proceedings of The First Association for the Advancement of Artificial Intelligence (AAAI) Bridge Program on Continual Causality**, Proceedings of Machine Learning Research (PMLR) 208:30-37, 2023.
[PMLR URL \(id: v208/busch23a\)](#)
- [16] M Willig, M Zečević, J Seng, F P Busch, “Causal Concept Identification in Open World Environments,” **Proceedings of The First Association for the Advancement of Artificial Intelligence (AAAI) Bridge Program on Continual Causality**, Proceedings of Machine Learning Research (PMLR) 208:52-58, 2023.
[PMLR URL \(id: v208/willig23a\)](#)

Pre-Prints

- [17] S Rödling*, M Zečević*, D S Dhimi, K Kersting, “Causal Explanations Over Time: Articulated Reasoning for Interactive Environments,” 2025.
[arXiv URL \(id: 2506.03915\)](#)
- [18] F P Busch, M Willig, M Zečević, K Kersting, D S Dhimi, “Structural Causal Circuits: Probabilistic Circuits Climbing All Rungs of Pearl’s Ladder of Causation,” 2025.
[OpenReview URL \(id: 25XyUTICdZ\)](#)
- [19] F P Busch, M Willig, M Zečević, K Kersting, D S Dhimi, “Counterfactual Sum-Product Networks,” 2025.
[OpenReview URL \(id: wLIsmzqzWJ\)](#)
- [20] D Steinmann, M Zečević, D S Dhimi, K Kersting, “We Should Care about Explaining Even Linear Programs,” 2024.
[Authorea URL \(doi: 10.22541/au.172833619.95560618\)](#)
- [21] M Zečević, D S Dhimi, C A Rothkopf, K Kersting, “Generating Explanations From Linear Structural Causal Models,” 2023.
[OpenReview URL \(id: V42LZPlorE\)](#)
- [22] K Didi, M Zečević, “On How AI Needs to Change to Advance the Science of Drug Discovery,” 2022.
[arXiv URL \(id: 2212.12560\)](#)
- [23] S Youssef, M Zečević, D S Dhimi, K Kersting, “Towards a Solution to Bongard Problems: A Causal Approach,” 2022.
[arXiv URL \(id: 2206.07196\)](#)
- [24] M Zečević, D S Dhimi, P Veličković, K Kersting, “Relating Graph Neural Networks to Structural Causal Models,” 2021.
[arXiv URL \(id: https://arxiv.org/pdf/2109.04173\)](#)

- [25] M Willig, M Zečević, D S Dhami, K Kersting, “The Causal Loss: Driving Correlation to Imply Causation,” 2021.
[arXiv URL \(id: 2110.12066\)](#)

Satire *Caution: Fun!* The following enumeration contains works that neither count as publication nor pre-print. It is simply fun projects that take a creative, humorous view on unspoken design choices within our scientific community on causality and AI.

- [S1] F P Busch, J Seng, M Zečević, “Breaking the Chains of Correlation: The Hammer Strikes Back,” April Fools’ Day 2023.
[matej-zecevic.de URL \(Breaking-the-Chains-of-Correlation.pdf\)](#)