

Full Publications List

Peer-Reviewed Journals

- [1] Nathanaël Fijalkow, Cristian Riveros, and James Worrell. "Probabilistic Automata of Bounded Ambiguity". In: *Information and Computation* (2020). DOI: <https://doi.org/10.1016/j.ic.2020.104648>. URL: <http://www.sciencedirect.com/science/article/pii/S089054012030136X>.
- [2] Alexander Clark and Nathanaël Fijalkow. "Consistent Unsupervised Estimators for Anchored PCFGs". In: *Transactions of the Association for Computational Linguistics* 8 (2020). URL: <https://transacl.org/ojs/index.php/tac1/article/view/1936>.
- [3] Nathanaël Fijalkow. "Lower bounds for the state complexity of probabilistic languages and the language of prime numbers". In: *The Journal of Logic and Computation* 30.1 (2020). DOI: 10.1093/logcom/exaa007. URL: <https://doi.org/10.1093/logcom/exaa007>.
- [4] Nathanaël Fijalkow, Stefan Kiefer, and Mahsa Shirmohammadi. "Trace Refinement in Labelled Markov Decision Processes". In: *Logical Methods in Computer Science* 16.2 (2020). DOI: 10.23638/LMCS-16(2:10)2020. URL: [https://doi.org/10.23638/LMCS-16\(2:10\)2020](https://doi.org/10.23638/LMCS-16(2:10)2020).
- [5] Florence Clerc, Nathanaël Fijalkow, Bartek Klin, and Prakash Panangaden. "Expressiveness of probabilistic modal logics: A gradual approach". In: *Information and Computation* 267 (2019). DOI: 10.1016/j.ic.2019.04.002. URL: <https://doi.org/10.1016/j.ic.2019.04.002>.
- [6] Nathanaël Fijalkow, Pierre Ohlmann, Joël Ouaknine, Amaury Pouly, and James Worrell. "Complete Semialgebraic Invariant Synthesis for the Kannan-Lipton Orbit Problem". In: *Theory of Computing Systems* 63.5 (2019). DOI: 10.1007/s00224-019-09913-3. URL: <https://doi.org/10.1007/s00224-019-09913-3>.
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- [8] Nathanaël Fijalkow and Charles Paperman. "Monadic Second-Order Logic with Arbitrary Monadic Predicates". In: *ACM Transactions on Computational Logic* 18.3 (2017). DOI: 10.1145/3091124. URL: <https://doi.org/10.1145/3091124>.
- [9] Nathanaël Fijalkow, Hugo Gimbert, Edon Kelmendi, and Youssouf Oualhadj. "Deciding the value 1 Problem for Probabilistic Leaktight Automata". In: *Logical Methods in Computer Science* 11.1 (2015). DOI: 10.2168/LMCS-11(2:12)2015. URL: [https://doi.org/10.2168/LMCS-11\(2:12\)2015](https://doi.org/10.2168/LMCS-11(2:12)2015).
- [10] Nathanaël Fijalkow and Martin Zimmermann. "Cost-Parity and Cost-Streett Games". In: *Logical Methods in Computer Science* 10.2 (2014). DOI: 10.2168/LMCS-10(2:14)2014. URL: [https://doi.org/10.2168/LMCS-10\(2:14\)2014](https://doi.org/10.2168/LMCS-10(2:14)2014).

- [11] Nathanaël Fijalkow and Florian Horn. “Les jeux d’accessibilité généralisée”. In: *Technique et Science Informatiques* 32.9-10 (2013). DOI: 10.3166/tsi.32.931-949. URL: <https://doi.org/10.3166/tsi.32.931-949>.

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- [12] Nathanaël Fijalkow. “The Theory of Universal Graphs for Games: Past and Future”. In: *Coalgebraic Methods in Computer Science, CMCS*. Ed. by Daniela Petrisan and Jurriaan Rot. Vol. 12094. Lecture Notes in Computer Science. Springer, 2020. DOI: 10.1007/978-3-030-57201-3_1. URL: https://doi.org/10.1007/978-3-030-57201-3_1.
- [13] Nathanaël Fijalkow, Pawel Gawrychowski, and Pierre Ohlmann. “Value Iteration Using Universal Graphs and the Complexity of Mean Payoff Games”. In: *Mathematical Foundations of Computer Science, MFCS*. Ed. by Javier Esparza and Daniel Král’. Vol. 170. LIPIcs. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020. DOI: 10.4230/LIPIcs.MFCS.2020.34. URL: <https://doi.org/10.4230/LIPIcs.MFCS.2020.34>.
- [14] Judith Clymo, Haik Manukian, Nathanaël Fijalkow, Adrià Gascón, and Brooks Paige. “Data Generation for Neural Programming by Example”. In: *AI&STATS*. Ed. by Silvia Chiappa and Roberto Calandra. Vol. 108. Proceedings of Machine Learning Research. PMLR, 2020. URL: <http://proceedings.mlr.press/v108/clymo20a.html>.
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- [17] Thomas Colcombet, Nathanaël Fijalkow, and Pierre Ohlmann. “Controlling a Random Population”. In: *Foundations of Software Science and Computation Structures, FoSSaCS*. 2020. DOI: 10.1007/978-3-030-45231-5_7. URL: https://doi.org/10.1007/978-3-030-45231-5_7.
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- [19] Thomas Colcombet and Nathanaël Fijalkow. “Universal Graphs and Good for Games Automata: New Tools for Infinite Duration Games”. In: *Foundations of Software Science and Computation Structures, FoSSaCS*. 2019. DOI: 10.1007/978-3-030-17127-8_1. URL: https://doi.org/10.1007/978-3-030-17127-8_1.
- [20] Nathanaël Fijalkow, Joël Ouaknine, Amaury Pouly, João Sousa Pinto, and James Worrell. “On the decidability of reachability in linear time-invariant systems”. In: *International Conference on Hybrid Systems: Computation and Control, HSCC*. 2019. DOI: 10.1145/3302504.3311796. URL: <https://doi.org/10.1145/3302504.3311796>.

- [21] Nathanaël Fijalkow, Engel Lefauchaux, Pierre Ohlmann, Joël Ouaknine, Amaury Pouly, and James Worrell. "On the Monniaux Problem in Abstract Interpretation". In: *International Symposium on Static Analysis, SAS*. 2019. DOI: 10.1007/978-3-030-32304-2_9. URL: https://doi.org/10.1007/978-3-030-32304-2_9.
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- [24] Nathanaël Fijalkow, Bastien Maubert, Aniello Murano, and Sasha Rubin. "Quantifying Bounds in Strategy Logic". In: *Computer Science in Logic, CSL*. 2018. DOI: 10.4230/LIPIcs.CSL.2018.23. URL: <https://doi.org/10.4230/LIPIcs.CSL.2018.23>.
- [25] Mathias Ruggaard Pedersen, Nathanaël Fijalkow, Giorgio Bacci, Kim G. Larsen, and Radu Mardare. "Timed Comparisons of Semi-Markov Processes". In: *International Conference on Language and Automata Theory and Applications, LATA*. 2018. DOI: 10.1007/978-3-319-77313-1_21. URL: https://doi.org/10.1007/978-3-319-77313-1_21.
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