

REFERENCES

- [1] Luca de Alfaro and Thomas A. Henzinger. 2000. Concurrent Omega-Regular Games. In *15th Annual IEEE Symposium on Logic in Computer Science, Santa Barbara, California, USA, June 26-29, 2000*. IEEE Computer Society, 141–154. <https://doi.org/10.1109/LICS.2000.855763>
- [2] Rajeev Alur and Thomas A. Henzinger. 1996. Reactive Modules. In *Proceedings, 11th Annual IEEE Symposium on Logic in Computer Science, New Brunswick, New Jersey, USA, July 27-30, 1996*. IEEE Computer Society, 207–218. <https://doi.org/10.1109/LICS.1996.561320>
- [3] Rajeev Alur, Thomas A. Henzinger, and Orna Kupferman. 2002. Alternating-time temporal logic. *J. ACM* 49, 5 (2002), 672–713. <https://doi.org/10.1145/585265.585270>
- [4] Robert J. Aumann. 1959. Acceptable points in general cooperative n -person games. In *Contributions to the theory of games, Vol. IV*. Princeton University Press, Princeton, N.J., 287–324.
- [5] Robert J. Aumann. 1960. Acceptable points in games of perfect information. *Pacific J. Math.* 10 (1960), 381–417.
- [6] Tomáš Babiak, Frantisek Blahoucek, Alexandre Duret-Lutz, Joachim Klein, Jan Kretinsky, David Müller, David Parker, and Jan Strejcek. 2015. The Hanoi Omega-Automata Format. In *Computer Aided Verification - 27th International Conference, CAV 2015, San Francisco, CA, USA, July 18-24, 2015, Proceedings, Part I (Lecture Notes in Computer Science, Vol. 9206)*, Daniel Kroening and Corina S. Pasareanu (Eds.). Springer, 479–486. https://doi.org/10.1007/978-3-319-21690-4_31
- [7] Roderick Bloem, Barbara Jobstmann, Nir Piterman, Amir Pnueli, and Yaniv Sa'ar. 2012. Synthesis of Reactive(1) designs. *J. Comput. Syst. Sci.* 78, 3 (2012), 911–938. <https://doi.org/10.1016/j.jcss.2011.08.007>
- [8] Julian C. Bradfield, Julian Gutierrez, and Michael J. Wooldridge. 2016. Partial-order Boolean games: informational independence in a logic-based model of strategic interaction. *Synth.* 193, 3 (2016), 781–811.
- [9] Krishnendu Chatterjee and Thomas A. Henzinger. 2012. A survey of stochastic ω -regular games. *J. Comput. Syst. Sci.* 78, 2 (2012), 394–413. <https://doi.org/10.1016/j.jcss.2011.05.002>
- [10] Krishnendu Chatterjee, Thomas A Henzinger, and Marcin Jurdzinski. 2005. Mean-payoff parity games. In *20th Annual IEEE Symposium on Logic in Computer Science (LICS'05)*. IEEE, 178–187.
- [11] Andrzej Ehrenfeucht and Jan Mycielski. 1979. Positional strategies for mean payoff games. *International Journal of Game Theory* 8, 2 (1979), 109–113.
- [12] Dana Fisman, Orna Kupferman, and Yoav Lustig. 2009. Rational Synthesis. *CoRR* abs/0907.3019 (2009). <http://arxiv.org/abs/0907.3019> eprint: 0907.3019.
- [13] Tong Gao, Julian Gutierrez, and Michael J. Wooldridge. 2017. Iterated Boolean Games for Rational Verification. In *Proceedings of the 16th Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2017, São Paulo, Brazil, May 8-12, 2017*. ACM, 705–713.
- [14] M. R. Garey and David S. Johnson. 1979. *Computers and Intractability: A Guide to the Theory of NP-Completeness*. W. H. Freeman.
- [15] Donald B. Gillies. 1959. 3. Solutions to General Non-Zero-Sum Games. In *Contributions to the Theory of Games (AM-40), Volume IV*, Albert William Tucker and Robert Duncan Luce (Eds.). Princeton University Press, 47–86. <https://doi.org/10.1515/9781400882168-005>
- [16] Julian Gutierrez, Paul Harrenstein, Giuseppe Perelli, and Michael J. Wooldridge. 2019. Nash Equilibrium and Bisimulation Invariance. *Log. Methods Comput. Sci.* 15, 3 (2019).
- [17] Julian Gutierrez, Paul Harrenstein, and Michael J. Wooldridge. 2015. Iterated Boolean games. *Inf. Comput.* 242 (2015), 53–79. <https://doi.org/10.1016/j.ic.2015.03.011>
- [18] Julian Gutierrez, Paul Harrenstein, and Michael J. Wooldridge. 2017. From model checking to equilibrium checking: Reactive modules for rational verification. *Artif. Intell.* 248 (2017), 123–157. <https://doi.org/10.1016/j.artint.2017.04.003>
- [19] Julian Gutierrez, Paul Harrenstein, and Michael J. Wooldridge. 2017. Reasoning about equilibria in game-like concurrent systems. *Ann. Pure Appl. Log.* 168, 2 (2017), 373–403.
- [20] Julian Gutierrez, Sarit Kraus, and Michael J. Wooldridge. 2019. Cooperative Concurrent Games. In *Proceedings of the 18th International Conference on Autonomous Agents and MultiAgent Systems, AAMAS '19, Montreal, QC, Canada, May 13-17, 2019*, Edith Elkind, Manuela Veloso, Noa Agmon, and Matthew E. Taylor (Eds.). International Foundation for Autonomous Agents and Multiagent Systems, 1198–1206. <http://dl.acm.org/citation.cfm?id=3331822>
- [21] Julian Gutierrez, Aniello Murano, Giuseppe Perelli, Sasha Rubin, Thomas Steeples, and Michael Wooldridge. 2020. Equilibria for games with combined qualitative and quantitative objectives. *Acta Informatica* (2020), 1–26. Publisher: Springer.
- [22] Julian Gutierrez, Aniello Murano, Giuseppe Perelli, Sasha Rubin, and Michael Wooldridge. 2017. Nash equilibria in concurrent games with lexicographic preferences. (2017). Publisher: AAAI.
- [23] Julian Gutierrez, Muhammad Najib, Giuseppe Perelli, and Michael Wooldridge. 2020. Automated Temporal Equilibrium Analysis: Verification and Synthesis of Multi-Player Games. [arXiv:2008.05638](https://arxiv.org/abs/2008.05638) [cs.LO]
- [24] Julian Gutierrez, Muhammad Najib, Giuseppe Perelli, and Michael J. Wooldridge. 2018. EVE: A Tool for Temporal Equilibrium Analysis. In *Automated Technology for Verification and Analysis - 16th International Symposium, ATVA 2018, Los Angeles, CA, USA, October 7-10, 2018, Proceedings (Lecture Notes in Computer Science, Vol. 11138)*, Shuvendu K. Lahiri and Chao Wang (Eds.). Springer, 551–557. https://doi.org/10.1007/978-3-030-01090-4_35
- [25] Julian Gutierrez, Muhammad Najib, Giuseppe Perelli, and Michael J. Wooldridge. 2019. On Computational Tractability for Rational Verification. In *Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence, IJCAI 2019, Macao, China, August 10-16, 2019*, Sarit Kraus (Ed.). ijcai.org, 329–335. <https://doi.org/10.24963/ijcai.2019/47>
- [26] Julian Gutierrez, Muhammad Najib, Giuseppe Perelli, and Michael J. Wooldridge. 2020. Automated temporal equilibrium analysis: Verification and synthesis of multi-player games. *Artif. Intell.* 287 (2020), 103353.
- [27] Julian Gutierrez, Giuseppe Perelli, and Michael J. Wooldridge. 2018. Imperfect information in Reactive Modules games. *Inf. Comput.* 261, Part (2018), 650–675. <https://doi.org/10.1016/j.ic.2018.02.023>
- [28] Julian Gutierrez, Giuseppe Perelli, and Michael J. Wooldridge. 2021. Multi-player games with LDL goals over finite traces. *Inf. Comput.* 276 (2021), 104555.
- [29] Thomas A. Henzinger. 2005. Games in system design and verification. In *Proceedings of the 10th Conference on Theoretical Aspects of Rationality and Knowledge (TARK-2005), Singapore, June 10-12, 2005*, Ron van der Meyden (Ed.). National University of Singapore, 1–4. <https://dl.acm.org/citation.cfm?id=1089935>
- [30] Richard M. Karp. 1972. Reducibility Among Combinatorial Problems. In *Proceedings of a symposium on the Complexity of Computer Computations, held March 20-22, 1972, at the IBM Thomas J. Watson Research Center, Yorktown Heights, New York, USA (The IBM Research Symposia Series)*, Raymond E. Miller and James W. Thatcher (Eds.). Plenum Press, New York, 85–103. https://doi.org/10.1007/978-1-4684-2001-2_9
- [31] Richard M Karp. 1978. A characterization of the minimum cycle mean in a digraph. *Discrete mathematics* 23, 3 (1978), 309–311.
- [32] Eryk Kopczynski. 2006. Half-Positional Determinacy of Infinite Games. In *Automata, Languages and Programming, 33rd International Colloquium, ICALP 2006, Venice, Italy, July 10-14, 2006, Proceedings, Part II (Lecture Notes in Computer Science, Vol. 4052)*, Michele Bugliesi, Bart Preneel, Vladimiro Sassone, and Ingo Wegener (Eds.). Springer, 336–347. https://doi.org/10.1007/11787006_29
- [33] John Nash. 1951. Non-cooperative games. *Annals of mathematics* (1951), 286–295.
- [34] John F Nash et al. 1950. Equilibrium points in n -person games. *Proceedings of the national academy of sciences* 36, 1 (1950), 48–49.
- [35] Martin J Osborne and Ariel Rubinstein. 1994. *A course in game theory*. MIT press.
- [36] Amir Pnueli. 1977. The Temporal Logic of Programs. In *18th Annual Symposium on Foundations of Computer Science, Providence, Rhode Island, USA*. IEEE Computer Society, 46–57. <https://doi.org/10.1109/SFCS.1977.32>
- [37] Amir Pnueli and Roni Rosner. 1989. On the Synthesis of an Asynchronous Reactive Module. In *Automata, Languages and Programming, 16th International Colloquium, ICALP89, Stresa, Italy, Proceedings (LNCS, Vol. 372)*. Springer, 652–671. <https://doi.org/10.1007/BFb0035790>
- [38] A. Prasad Sistla and Edmund M. Clarke. 1985. The Complexity of Propositional Linear Temporal Logics. *J. ACM* 32, 3 (1985), 733–749. <https://doi.org/10.1145/3828.3837>
- [39] Larry J. Stockmeyer and Ashok K. Chandra. 1979. Provably Difficult Combinatorial Games. *SIAM J. Comput.* 8, 2 (1979), 151–174. <https://doi.org/10.1137/0208013>
- [40] Alexis Toumi, Julian Gutierrez, and Michael J. Wooldridge. 2015. A Tool for the Automated Verification of Nash Equilibria in Concurrent Games. In *Theoretical Aspects of Computing - ICTAC 2015 - 12th International Colloquium Cali, Colombia, October 29-31, 2015, Proceedings (Lecture Notes in Computer Science, Vol. 9399)*, Martin Leucker, Camilo Rueda, and Frank D. Valencia (Eds.). Springer, 583–594. https://doi.org/10.1007/978-3-319-25150-9_34
- [41] Michael Ummels and Dominik Wojtczak. 2011. The Complexity of Nash Equilibria in Limit-Average Games. *CoRR* abs/1109.6220 (2011). <http://arxiv.org/abs/1109.6220>
- [42] Wiebe van der Hoek, Alessio Lomuscio, and Michael J. Wooldridge. 2006. On the complexity of practical ATL model checking. In *5th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2006), Hakodate, Japan, May 8-12, 2006*, Hideyuki Nakashima, Michael P. Wellman, Gerhard Weiss, and Peter Stone (Eds.). ACM, 201–208. <https://doi.org/10.1145/1160633.1160665>
- [43] Yaron Velnor, Krishnendu Chatterjee, Laurent Doyen, Thomas A. Henzinger, Alexander Moshe Rabinovich, and Jean-François Raskin. 2015. The complexity of multi-mean-payoff and multi-energy games. *Inf. Comput.* 241 (2015), 177–196. <https://doi.org/10.1016/j.ic.2015.03.001>
- [44] Michael J. Wooldridge, Julian Gutierrez, Paul Harrenstein, Enrico Marchioni, Giuseppe Perelli, and Alexis Toumi. 2016. Rational Verification: From Model Checking to Equilibrium Checking. In *Proceedings of the Thirtieth AAAI Conference on Artificial Intelligence, Phoenix, Arizona, USA*. AAAI Press, 4184–4191.
- [45] Uri Zwick and Mike Paterson. 1996. The complexity of mean payoff games on graphs. *Theoretical Computer Science* 158, 1-2 (1996), 343–359.