



















## REFERENCES

- [1] Shaull Almagor and Orna Kupferman. 2020. Good-Enough Synthesis. In *International Conference on Computer Aided Verification, CAV 2020*.
- [2] Rajeev Alur, Thomas A. Henzinger, and Orna Kupferman. 2002. Alternating-time temporal logic. *J. ACM* (2002).
- [3] Benjamin Aminof, Giuseppe De Giacomo, and Sasha Rubin. 2021. Best-Effort Synthesis: Doing Your Best Is Not Harder Than Giving Up. In *International Joint Conference on Artificial Intelligence, IJCAI 2021*.
- [4] Benjamin Aminof, Marta Kwiatkowska, Bastien Maubert, Aniello Murano, and Sasha Rubin. 2019. Probabilistic Strategy Logic. In *International Joint Conference on Artificial Intelligence, IJCAI 2019*.
- [5] Thomas Ball and Orna Kupferman. 2006. An Abstraction-Refinement Framework for Multi-Agent Systems. In *Symposium on Logic in Computer Science LICS 2006*.
- [6] Francesco Belardinelli, Angelo Ferrando, Wojciech Jamroga, Vadim Malvone, and Aniello Murano. 2023. Scalable Verification of Strategy Logic through Three-Valued Abstraction. In *International Joint Conference on Artificial Intelligence, IJCAI 2023*.
- [7] Francesco Belardinelli, Sophia Knight, Alessio Lomuscio, Bastien Maubert, Aniello Murano, and Sasha Rubin. 2021. Reasoning About Agents That May Know Other Agents' Strategies. In *International Joint Conference on Artificial Intelligence, IJCAI 2021*.
- [8] Francesco Belardinelli and Alessio Lomuscio. 2017. Agent-based Abstractions for Verifying Alternating-time Temporal Logic with Imperfect Information. In *Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2017*.
- [9] Francesco Belardinelli, Alessio Lomuscio, and Vadim Malvone. 2019. An Abstraction-Based Method for Verifying Strategic Properties in Multi-Agent Systems with Imperfect Information. In *Conference on Artificial Intelligence, AAAI 2019*.
- [10] Francesco Belardinelli, Alessio Lomuscio, Aniello Murano, and Sasha Rubin. 2017. Verification of Multi-agent Systems with Imperfect Information and Public Actions. In *Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2017*.
- [11] Raphaël Berthon, Bastien Maubert, and Aniello Murano. 2017. Decidability Results for  $ATL^*$  with Imperfect Information and Perfect Recall. In *Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2017*.
- [12] Raphaël Berthon, Bastien Maubert, Aniello Murano, Sasha Rubin, and Moshe Y. Vardi. 2017. Strategy logic with imperfect information. In *Symposium on Logic in Computer Science, LICS 2017*.
- [13] Raphaël Berthon, Bastien Maubert, Aniello Murano, Sasha Rubin, and Moshe Y. Vardi. 2021. Strategy Logic with Imperfect Information. *ACM Trans. Comput. Log.* (2021).
- [14] Raven Beutner and Bernd Finkbeiner. 2021. A Temporal Logic for Strategic Hyperproperties. In *International Conference on Concurrency Theory, CONCUR 2021*.
- [15] Raven Beutner and Bernd Finkbeiner. 2022. Software Verification of Hyperproperties Beyond k-Safety. In *International Conference on Computer Aided Verification, CAV 2022*.
- [16] Raven Beutner and Bernd Finkbeiner. 2023. AutoHyper: Explicit-State Model Checking for HyperLTL. In *International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2023*.
- [17] Raven Beutner and Bernd Finkbeiner. 2023. HyperATL\*: A Logic for Hyperproperties in Multi-Agent Systems. *Log. Methods Comput. Sci.* (2023).
- [18] Raven Beutner and Bernd Finkbeiner. 2024. Hyper Strategy Logic. *CoRR* (2024).
- [19] Raven Beutner and Bernd Finkbeiner. 2024. On Alternating-Time Temporal Logic, Hyperproperties, and Strategy Sharing. In *Conference on Artificial Intelligence, AAAI 2024*.
- [20] Raven Beutner, Bernd Finkbeiner, Hadar Frenkel, and Niklas Metzger. 2023. Second-Order Hyperproperties. In *International Conference on Computer Aided Verification, CAV 2023*.
- [21] Patricia Bouyer, Orna Kupferman, Nicolas Markey, Bastien Maubert, Aniello Murano, and Giuseppe Perelli. 2019. Reasoning about Quality and Fuzziness of Strategic Behaviours. In *International Joint Conference on Artificial Intelligence, IJCAI 2019*.
- [22] Laura Bozzelli, Bastien Maubert, and Sophie Pinchinat. 2015. Unifying Hyper and Epistemic Temporal Logics. In *International Conference on Foundations of Software Science and Computation Structures, FoSSaCS 2015*.
- [23] Nils Bulling and Wojciech Jamroga. 2014. Comparing variants of strategic ability: how uncertainty and memory influence general properties of games. *Auton. Agents Multi Agent Syst.* (2014).
- [24] Petr Cermák, Alessio Lomuscio, and Aniello Murano. 2015. Verifying and Synthesising Multi-Agent Systems against One-Goal Strategy Logic Specifications. In *Conference on Artificial Intelligence, AAAI 2015*.
- [25] Krishnendu Chatterjee, Thomas A. Henzinger, and Nir Piterman. 2010. Strategy logic. *Inf. Comput.* (2010).
- [26] Swarat Chaudhuri, Sumit Gulwani, and Roberto Lubliner. 2012. Continuity and robustness of programs. *Commun. ACM* (2012).
- [27] Michael R. Clarkson, Bernd Finkbeiner, Masoud Kolehian, Kristopher K. Micinski, Markus N. Rabe, and César Sánchez. 2014. Temporal Logics for Hyperproperties. In *International Conference on Principles of Security and Trust, POST 2014*.
- [28] Michael R. Clarkson and Fred B. Schneider. 2008. Hyperproperties. In *Computer Security Foundations Symposium, CSF 2008*.
- [29] Norine Coenen, Bernd Finkbeiner, Christopher Hahn, and Jana Hofmann. 2019. The Hierarchy of Hyperlogics. In *Symposium on Logic in Computer Science, LICS 2019*.
- [30] Catalin Dima and Ferucio Laurentiu Tiplea. 2011. Model-checking ATL under Imperfect Information and Perfect Recall Semantics is Undecidable. *CoRR* (2011).
- [31] Alexandre Duret-Lutz, Etienne Renault, Maximilien Colange, Florian Renkin, Alexandre Gbaguidi Aisse, Philipp Schlehner-Caissier, Thomas Medioni, Antoine Martin, Jérôme Dubois, Clément Gillard, and Henrich Lauko. 2022. From Spot 2.0 to Spot 2.10: What's New?. In *International Conference on Computer Aided Verification, CAV 2022*.
- [32] E. Allen Emerson and Joseph Y. Halpern. 1986. "Sometimes" and "Not Never" revisited: on branching versus linear time temporal logic. *J. ACM* (1986).
- [33] Bernd Finkbeiner, Markus N. Rabe, and César Sánchez. 2015. Algorithms for Model Checking HyperLTL and HyperCTL\*. In *International Conference on Computer Aided Verification, CAV 2015*.
- [34] Bernd Finkbeiner and Martin Zimmermann. 2017. The First-Order Logic of Hyperproperties. In *Symposium on Theoretical Aspects of Computer Science, STACS 2017*.
- [35] Jens Oliver Gutsfeld, Markus Müller-Olm, and Christoph Ohrem. 2020. Propositional Dynamic Logic for Hyperproperties. In *International Conference on Concurrency Theory, CONCUR 2020*.
- [36] Sophia Knight and Bastien Maubert. 2019. Dealing with imperfect information in Strategy Logic. *CoRR* (2019).
- [37] François Laroussinie and Nicolas Markey. 2015. Augmenting ATL with strategy contexts. *Inf. Comput.* (2015).
- [38] François Laroussinie, Nicolas Markey, and Arnaud Sangnier. 2015. ATLsc with partial observation. In *International Symposium on Games, Automata, Logics and Formal Verification, GandALF 2015*.
- [39] Alessio Lomuscio, Hongyang Qu, and Franco Raimondi. 2009. MCMAS: A Model Checker for the Verification of Multi-Agent Systems. In *International Conference on Computer Aided Verification, CAV 2009*.
- [40] Vadim Malvone, Aniello Murano, and Loredana Sorrentino. 2016. Concurrent Multi-Player Parity Games. In *International Conference on Autonomous Agents & Multiagent Systems, AAMAS 2016*.
- [41] Bastien Maubert and Aniello Murano. 2018. Reasoning about Knowledge and Strategies under Hierarchical Information. In *International Conference on Principles of Knowledge Representation and Reasoning, KR 2018*.
- [42] Daryl McCullough. 1988. Noninterference and the composability of security properties. In *Symposium on Security and Privacy, SP 1988*.
- [43] John McLean. 1994. A general theory of composition for trace sets closed under selective interleaving functions. In *Symposium on Research in Security and Privacy, SP 1994*.
- [44] Satoru Miyano and Takeshi Hayashi. 1984. Alternating Finite Automata on omega-Words. *Theor. Comput. Sci.* (1984).
- [45] Fabio Mogavero, Aniello Murano, Giuseppe Perelli, and Moshe Y. Vardi. 2014. Reasoning About Strategies: On the Model-Checking Problem. *ACM Trans. Comput. Log.* (2014).
- [46] Fabio Mogavero, Aniello Murano, and Luigi Sauro. 2013. On the Boundary of Behavioral Strategies. In *Symposium on Logic in Computer Science, LICS 2013*.
- [47] Fabio Mogavero, Aniello Murano, and Luigi Sauro. 2014. A Behavioral Hierarchy of Strategy Logic. In *International Workshop on Computational Logic in Multi-Agent Systems, CLIMA 2014*.
- [48] John F Nash Jr. 1950. Equilibrium points in n-person games. *Proceedings of the national academy of sciences* (1950).
- [49] Marc Pauly and Rohit Parikh. 2003. Game Logic - An Overview. *Stud Logica* (2003).
- [50] Nir Piterman. 2007. From Nondeterministic Büchi and Streett Automata to Deterministic Parity Automata. *Log. Methods Comput. Sci.* (2007).
- [51] Andrei Sabelfeld. 2003. Confidentiality for Multithreaded Programs via Bisimulation. In *International Conference on Perspectives of Systems Informatics, PSI 2003*.
- [52] Anoo Shiravan Saboori and Christoforos N. Hadjicostis. 2013. Verification of initial-state opacity in security applications of discrete event systems. *Inf. Sci.* (2013).
- [53] Moshe Y. Vardi. 1995. Alternating Automata and Program Verification. In *Computer Science Today: Recent Trends and Developments*.
- [54] J. Todd Wittbold and Dale M. Johnson. 1990. Information Flow in Nondeterministic Systems. In *Symposium on Security and Privacy, SP 1990*.
- [55] Kuize Zhang, Xiang Yin, and Majid Zamani. 2019. Opacity of Nondeterministic Transition Systems: A (Bi)Simulation Relation Approach. *IEEE Trans. Autom. Control.* (2019).