

















- the 21st Annual IEEE Symposium on Logic in Computer Science (LICS06), pages 379–388. IEEE, 2006.
- [4] C. Barrett, C. Conway, M. Deters, L. Hadarean, D. Jovanović, T. King, A. Reynolds, and C. Tinelli. CVC4. In *Proceedings of the 23rd International Conference on Computer Aided Verification (CAV11)*, pages 171–177. Springer, 2011.
- [5] N. Bulling and W. Jamroga. Comparing variants of strategic ability: how uncertainty and memory influence general properties of games. *Autonomous Agents and Multi-Agent Systems*, 28(3):474–518, 2014.
- [6] M. Cohen, M. Dam, A. Lomuscio, and H. Qu. A data symmetry reduction technique for temporal-epistemic logic. In *Proceedings of the 7th International Symposium on Automated Technology for Verification and Analysis (ATVA09)*, volume 5799 of *Lecture Notes in Computer Science*, pages 69–83. Springer, 2009.
- [7] M. Cohen, M. Dam, A. Lomuscio, and F. Russo. Abstraction in model checking multi-agent systems. In *Proceedings of the 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS09)*, pages 945–952. IFAAMAS Press, 2009.
- [8] S. Das, D. Dill, and S. Park. Experience with predicate abstraction. In *Proceedings of the 11th International Conference on Computer Aided Verification (CAV99)*, pages 160–171. Springer, 1999.
- [9] C. Enea and C. Dima. Abstractions of multi-agent systems. In *Proceedings of 5th International Central and Eastern European Conference on Multi-Agent Systems (CEEMAS07)*, volume 4696 of *Lecture Notes in Computer Science*, pages 11–21. Springer, 2007.
- [10] R. Fagin, J. Y. Halpern, Y. Moses, and M. Y. Vardi. *Reasoning about Knowledge*. MIT Press, Cambridge, 1995.
- [11] P. Gammie and R. van der Meyden. MCK: Model checking the logic of knowledge. In *Proceedings of 16th International Conference on Computer Aided Verification (CAV04)*, volume 3114 of *Lecture Notes in Computer Science*, pages 479–483. Springer, 2004.
- [12] P. Gonzalez, A. Griesmayer, and A. Lomuscio. Verification of GSM-based artifact-centric systems by predicate abstraction. In *Proceedings of the 13th International Conference on Service Oriented Computing (ICSOC15)*, volume 9435 of *Lecture Notes in Computer Science*, pages 253–268. Springer, 2015.
- [13] S. Graf and H. Saïdi. Construction of abstract state graphs with pvs. In *Proceedings of the 9th International Conference on Computer Aided Verification (CAV97)*, volume 1254 of *Lecture Notes in Computer Science*, pages 72–83. Springer, 1997.
- [14] W. van der Hoek and M. Wooldridge. Tractable multiagent planning for epistemic goals. In *Proceedings of the First International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS02)*, pages 1167–1174. ACM Press, 2002.
- [15] M. Huth, R. Jagadeesan, and D. Schmidt. Modal transition systems: A foundation for three-valued program analysis. *ACM Transactions on Programming Languages and Systems*, pages 155–169, 2001.
- [16] W. Jamroga and W. van der Hoek. Agents that know how to play. *Fundamenta Informaticae*, 62:1–35, 2004.
- [17] M. Kacprzak, W. Nabialek, A. Niewiadomski, W. Penczek, A. Pólrola, M. Szreter, B. Woźna, and A. Zbrzezny. Verics 2007 - a model checker for knowledge and real-time. *Fundamenta Informaticae*, 85(1):313–328, 2008.
- [18] B. Konikowska and W. Penczek. Model checking for multi-valued computation tree logics. In *Beyond Two: Theory and Applications of Multiple Valued Logic*, pages 193–210. Physica-Verlag, 2003.
- [19] B. Konikowska and W. Penczek. Model checking for multivalued logic of knowledge and time. In *Proceedings of the 5th international joint conference on Autonomous Agents and Multiagent Systems (AAMAS06)*, pages 169–176. IFAAMAS, 2006.
- [20] M. Köster and P. Lohmann. Abstraction for model checking modular interpreted systems over ATL. In *Programming Multi-Agent Systems*, volume 7217 of *Lecture Notes in Computer Science*, pages 95–113. Springer, 2012.
- [21] A. Lomuscio and J. Michaliszyn. An abstraction technique for the verification of multi-agent systems against ATL specifications. In *Proceedings of the 14th International Conference on Principles of Knowledge Representation and Reasoning (KR14)*, pages 428–437. AAAI Press, 2014.
- [22] A. Lomuscio and J. Michaliszyn. Verifying multi-agent systems by model checking three-valued abstractions. In *Proceedings of the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS15)*, pages 189–198, 2015.
- [23] A. Lomuscio and J. Michaliszyn. MCMAS<sub>PA</sub>: A predicate abstraction model checker for multi-agent systems. <http://vas.doc.ic.ac.uk/software/extensions>, 2016.
- [24] A. Lomuscio, H. Qu, and F. Raimondi. MCMAS: A model checker for the verification of multi-agent systems. *Software Tools for Technology Transfer*, 2015. <http://dx.doi.org/10.1007/s10009-015-0378-x>.
- [25] A. Lomuscio and F. Raimondi. Model checking knowledge, strategies, and games in multi-agent systems. In *Proceedings of the 5th International Joint Conference on Autonomous agents and Multi-Agent Systems (AAMAS06)*, pages 161–168. ACM Press, 2006.
- [26] W. Penczek and A. Lomuscio. Verifying epistemic properties of multi-agent systems via bounded model checking. *Fundamenta Informaticae*, 55(2):167–185, 2003.
- [27] F. Raimondi and A. Lomuscio. Automatic verification of multi-agent systems by model checking via OBDDs. *Journal of Applied Logic*, 5(2):235–251, 2005.
- [28] W. van der Hoek and M. Wooldridge. Model checking cooperation, knowledge, and time - a case study. *Research In Economics*, 57(3):235–265, 2003.
- [29] M. Wooldridge and N. R. Jennings. Intelligent agents: theory and practice. *Knowledge Engineering Review*, 2(10):115–152, 1995.