## List of Publications

### Ofer Arieli

### **Books**

 A.Avron, O.Arieli, A.Zamansky. Theory of Effective Propositional Paraconsistent Logics. Studies in Logic, volume 75 (sub-series: Mathematical Logic and Foundations), College Publications, 2018 (ISBN: 978-1-84890-270-1).

#### Articles in Scientific Journals

- 1. O.Arieli, A.Avron. Reasoning with logical bilattices. *Journal of Logic, Language, and Information* 5(1), pages 25–63, 1996.
- 2. O.Arieli, A.Avron. The value of the four values. Artificial Intelligence 102(1), pages 97–141, 1998.
- 3. O.Arieli, A.Avron. A model theoretic approach to recover consistent data from inconsistent knowledge-bases. *Journal of Automated Reasoning* 22(3), pages 263–309, 1999.
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- O.Arieli, A.Avron. Bilattices and paraconsistency. In: Frontiers of Paraconsistent Logic. D. Batens, C. Mortensen, G. Priest, and J. Van Bendegem, editors, Studies in Logic and Computation 8, Research Studies Press, pages 11–27, 2000.
- 6. O.Arieli, A.Avron. General patterns for nonmonotonic reasoning: from basic entailments to plausible relations. *The Logic Journal of the Interest Group in Pure and Applied Logics* (IGPL) 8(2), pages 119–148, 2000.
- 7. O.Arieli. Paraconsistent declarative semantics for extended logic programs. *Annals of Mathematics and Artificial Intelligence* 36(4), pages 381-417, 2002.
- 8. O.Arieli, M.Denecker. Reducing preferential paraconsistent reasoning to classical entailment. *Journal of Logic and Computation* 13(4), pages 557-580, 2003.
- O.Arieli. Reasoning with different levels of uncertainty. Journal of Applied Non-Classical Logics 13(3–4), pages 317–343, 2003.
- 10. O.Arieli, M.Denecker, B.Van Nuffelen, M.Bruynooghe. Coherent integration of databases by abductive logic programming. *Journal of Artificial Intelligence Research* 21, pages 245–286, 2004.
- 11. O.Arieli, M.Denecker, B.Van Nuffelen, M.Bruynooghe. Computational methods for database repair by signed formulae. *Annals of Mathematics and Artificial Intelligence* 46(1–2), pages 4–37, 2006.
- 12. C.Cornelis, O.Arieli, G.Deschrijver, E.Kerre. Uncertainty modeling by bilattice-based squares and triangles. *IEEE Transactions on Fuzzy Systems* 15(2), pages 161–175, 2007.
- 13. G.Deschrijver, O.Arieli, C.Cornelis, E.Kerre. A bilattice-based framework for handling graded truth and imprecision. *Uncertainty, Fuzziness and Knowledge-Based Systems* 15(1), pages 13–41, 2007.
- 14. O.Arieli. Paraconsistent reasoning and preferential entailments by signed quantified Boolean formulae. *ACM Transactions on Computational Logic* 8(3), Article 18, 2007.

- 15. O.Arieli, M.Denecker, M.Bruynooghe. Distance semantics for database repair. *Annals of Mathematics and Artificial Intelligence* 50(3–4), pages 389–415, 2007.
- 16. O.Arieli. Distance-based paraconsistent logics. The International Journal of Approximate Reasoning 48(3), special issue on non-monotonic reasoning and uncertainty, pages 766–783, 2008.
- 17. O.Arieli. Reasoning with prioritized information by iterative aggregation of distance functions. *Journal of Applied Logic* 6(4), pages 589–605, 2008.
- 18. O.Arieli, A.Zamansky. Distance-based non-deterministic semantics for reasoning with uncertainty. *The Logic Journal of the Interest Group in Pure and Applied Logics* 17(4), pages 325–350, 2009.
- 19. M.Denecker, A.Cortés-Calabuig, M.Bruynooghe, O.Arieli. Towards a logical reconstruction of a theory for locally closed databases. *ACM Transactions on Database Systems* 35(3), Article 22, 2010.
- 20. O.Arieli, A.Zamansky. Simplified forms of computerized reasoning with distance semantics. *Journal of Applied Logic* 9(1), pages 1–22, 2011.
- 21. O.Arieli, A.Zamansky. A framework for reasoning under uncertainty based on non-deterministic distance semantics. *International Journal of Approximate Reasoning* 52(2), pages 184–211, 2011.
- 22. O.Arieli, A.Avron, A.Zamansky. Maximal and pre-maximal paraconsistency in the framework of three-valued semantics. *Studia Logica* 97(1), pages 31–60, 2011.
- 23. O.Arieli, A.Avron, A.Zamansky. Ideal paraconsistent logics. Studia Logica 99(1-3), pages 31-60, 2011.
- 24. O.Arieli, M.Caminada. A QBF-based formalization of abstract argumentation semantics. *Journal of Applied Logic* 11(2), pages 229–252, 2013.
- 25. O.Arieli, A.Zamansky. A dissimilarity-based framework for generating inconsistency-tolerant logics. *Annals of Mathematics and Artificial Intelligence* 73(1–2), pages 47–73, 2015.
- 26. O.Arieli, C.Straßer. Sequent-based logical argumentation. *Journal of Argument and Computation* 6(1), pages 73–99, 2015.
- 27. O.Arieli. Conflict-free and conflict-tolerant semantics for constrained argumentation frameworks. *Journal of Applied Logic* 13(4), pages 582–604, 2015.
- 28. O.Arieli, A.Avron. Three-valued paraconsistent propositional logics. In: *New Directions in Paraconsistent Logic*, Chapter 4, J.Y.Béziau, M.Chakraborty and S.Dutta, editors, pages 91–129, Springer, 2015.
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- 30. O.Arieli, C.Straßer. Deductive argumentation by enhanced sequent calculi and dynamic derivations. *Electronic Notes in Theoretical Computer Science* 323, pages 21–37, 2016.
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- 34. C.Straßer, O.Arieli. Normative reasoning by sequent-based argumentation. *Journal of Logic and Computation* 29(3), pages 387–415, 2019.
- 35. O.Arieli, C.Straßer. Logical argumentation by dynamic proof systems. *Theoretical Computer Science* 781, pages 63–91, 2019.

- 36. O.Arieli, A.Borg, J.Heyninck. A review of the relations between logical argumentation and reasoning with maximal consistency. *Annals of Mathematics and Artificial Intelligence* 87(3), pages 187–226, 2019.
- 37. J.Heyninck, O.Arieli. Simple contrapositive assumption-based argumentation frameworks. *Journal of Approximate Reasoning* 121, pages 103–124, 2020.
- 38. A.Borg, C.Straßer, O.Arieli. A generalized proof-theoretic approach to logical argumentation based on hypersequents. *Studia Logica* 109(1), pages 167–238, 2021.
- 39. O.Arieli, A.Borg, J.Heyninck, C.Straßer. Logic-based approaches to formal argumentation. *Journal of Applied Logics The IfCoLog Journal of Logics and their Applications* 8(6), pages 1793–1898, 2021.
- 40. O.Arieli, J.Heyninck. Simple contrapositive assumption-based argumentation. Part II: Reasoning with preferences. *Journal of Approximate Reasoning* 139, pages 28–53, 2021.
- 41. O.Arieli, A.Borg, C.Straßer. A postulate-driven study of logical argumentation. *Journal of Artificial Intelligence* 322, Article 103966, 2023.
- 42. J.Heyninck, O.Arieli, B.Bogaerts. Non-deterministic approximation fixpoint theory and its application in disjunctive logic programming. *Journal of Artificial Intelligence* 331, Article 104110, 2024.

## Refereed Papers in Conference Proceedings

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- 2. O.Arieli, A.Avron. A bilattice-based approach to recover consistent data from inconsistent knowledge-bases. *Proceedings of the 4th Bar-Ilan Symposium on Foundations of Artificial Intelligence* (BIS-FAI'95), M.Koppel and E.Shamir, editors, pages 14–23, AAAI Press, June 1995.
- 3. O.Arieli, A.Avron. Automatic diagnoses for properly stratified knowledge-bases. *Proceedings of the 8th IEEE International Conference on Tools with Artificial Intelligence* (ICTAI'96), pages 392–399, IEEE Press, November 1996.
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- 5. O.Arieli. A four-valued approach for handling inconsistency in prioritized knowledge-bases. *Proceedings of the 10th Annual Conference of the Florida Artificial Intelligence Research Society* (FLAIRS'97), pages 92–96, May 1997.
- 6. O.Arieli, A.Avron. The logical role of the four-valued bilattice. *Proceedings of the 13th IEEE Annual Symposium on Logic in Computer Science* (LICS'98), pages 218–226, IEEE Press, June 1998.
- 7. O.Arieli. Four-valued logics for reasoning with uncertainty in prioritized data. *Proceedings of the 7th Conference on Information Processing and Management of Uncertainty in Knowledge-Base Systems* (IPMU'98), pages 503–510, Editions EDK publishers, July 1998.
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- 11. O.Arieli. B.Van Nuffelen, M.Denecker, M.Bruynooghe. Coherent composition of distributed knowledge-bases through abduction. *Proceedings of the 8th International Conference on Logic Programming, Artificial Intelligence and Reasoning* (LPAR'01), Lecture Notes in Computer Science No.2250, A.Nieuwenhuis, and A.Voronkov, editors, pages 620–635, Springer, December 2001.
- 12. O.Arieli, M.Denecker. Modeling paraconsistent reasoning by classical logic. *Proceedings of the 2nd International Symposium on Foundations of Information and Knowledge Systems* (FoIKS'02), Lecture Notes in Computer Science No.2284, T.Eiter and K.D.Schewe, editors, pages 1–14, Springer, February 2002.
- 13. O.Arieli. Paraconsistent semantics for extended logic programs. *Proceedings of the International Conference of Artificial Intelligence* (IC-AI'02), H.R.Arabnia and Y.Mun, editors, Vol.III, pages 1199–1205, CMSRA Press, June 2002.
- 14. O.Arieli, M.Denecker, B.Van Nuffelen, M.Bruynooghe. Repairing inconsistent databases: A model-theoretic approach and abductive reasoning. Proceedings of the ICLP'02 Workshop on Paraconsistent Computational Logic (PCL'02), Federated Logic Conference (FLoC'02), H.Decker, J.Villadsen and T.Waradai, editors, Datalogiske Skrifter Vol.95, pages 51–65, Roskilde University, July 2002.
- 15. O.Arieli. Preferential logics for reasoning with graded uncertainty. Proceedings of the 7th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU'03), Lecture Notes in Artificial Intelligence No.2711, T.D.Nielsen and N.L.Zhang, editors, pages 515–527, Springer, July 2003.
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- 17. B.Van Nuffelen, A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Data integration using ID-logic. *Proceedings of the 16th International Conference on Advanced Information Systems Engineering* (CAiSE'04), Lecture Notes in Computer Science No.3084, A.Persson and J.Stirna, editors, pages 67–81, Springer, June 2004.
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- O.Arieli, C.Cornelis, G.Deschrijver, E.Kerre. Relating intuitionistic fuzzy sets and interval-valued fuzzy sets through bilattices. Proceedings of the 6th International FLINS Conference on Applied Computational Intelligence (FLINS'04), D.Ruan et al., editors, World Scientific, pages 57–64, September 2004.
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- 23. O.Arieli, C.Cornelis, G.Deschrijver. Preference modeling by rectangular bilattices. *Proceedings of the 3rd International Conference on Modeling Decisions for Artificial Intelligence* (MDAI'06), Lecture Notes in Artificial Intelligence No.3885, V.Torra et al., editors, pages 22–33, Springer, April 2006.
- 24. O.Arieli. Distance-based semantics for multiple-valued logics. *Proceedings of the 11th International Workshop on Non-Monotonic Reasoning* (NMR'06), J.Dix and A.Hunter, editors, pages 153–161, June 2006.
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