

List of Publications

Ofer Arieli

Books

1. 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.
4. O.Arieli. Four-valued logics for reasoning with uncertainty in prioritized Data. In: *Information, Uncertainty, Fusion*. B.Bouchon-Meunier, R.R.Yager, and L.A.Zadeh, editors, Kluwer Academic Publishers, pages 293–304, 1999.
5. 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.
9. 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.
29. O.Arieli, A.Zamansky. A graded approach to database repair by context-aware distance semantics. *Fuzzy Sets and Systems* 298, pages 4–21, 2016.
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.
31. O.Arieli. On the acceptance of loops in argumentation frameworks. *Journal of Logic and Computation* 26(4), pages 1203–1234, 2016.
32. O.Arieli, A. Avron. Four-valued parafinite logics. *Studia Logica* 105(6), pages 1087–1122, 2017.
33. O.Arieli, A.Borg, C.Straßer. Reasoning with maximal consistency by argumentative approaches. *Journal of Logic and Computation* 28(7), pages 1523–1563, 2018.
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

1. O.Arieli, A.Avron. Logical bilattices and inconsistent data. *Proceedings of the 9th Annual IEEE Symposium on Logic in Computer Science (LICS'94)*, pages 468–476, IEEE Press, July 1994.
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 (BISFAI'95)*, M.Koppel and E.Shamir, editors, pages 14–23, AAI 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.
4. O.Arieli, A.Avron. Four-valued diagnoses for stratified knowledge-bases. *Proceedings of the Annual Conference of the European Association for Computer Science Logic (CSL'96)*, September 1996 – Selected Papers. Lecture Notes in Computer Science No.1258, D.Van-Dalen and M.Benzem, editors, pages 1–17, Springer-Verlag, 1997.
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.
8. O.Arieli, A.Avron. Nonmonotonic and paraconsistent reasoning: From basic entailments to plausible relations. *Proceedings of the 5th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ESCSQARU'99)*, Lecture Notes in Artificial Intelligence No.1638, A.Hunter and S.Parsons, editors, pages 11–22, Springer-Verlag, July 1999.
9. O.Arieli. An algorithmic approach to recover inconsistent knowledge-bases. *Proceedings of the 7th European Conference on Logics in Artificial Intelligence (JELIA'00)*, Lecture Notes in Artificial Intelligence No.1919, M.Ojeda-Aciego, I.P.de Guzman, G.Brewka, and L.M.Pereira, editors, pages 148–162, Springer, September 2000.

10. O.Arieli. Reasoning with modularly pointwise preferential relations. *Proceedings of the 12th Belgian–Dutch Artificial Intelligence Conference (BNAIC'00)*, A. van den Bosch and H. Weigand, editors, pages 61–68, BNVKI Association, November 2000.
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.
16. O.Arieli, M.Denecker, B.Van Nuffelen, M.Bruynooghe. Database repair by signed formulae. *Proceedings of the 3rd International Symposium on Foundations of Information and Knowledge Systems (FoIKS'04)*, Lecture Notes in Computer Science No.2942, D.Seipel and J.Turell–Torres, editors, pages 14–30, Springer, February 2004.
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.
18. O.Arieli. Paraconsistent preferential reasoning by signed quantified Boolean formulae. *Proceedings of the 16th European Conference on Artificial Intelligence (ECAI'04)*, R.López de Mántaras and L.Saitta, editors, pages 773–777, IOS Press, August 2004.
19. 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.
20. O.Arieli, C.Cornelis, G.Deschrijver, E.Kerre. Bilattice-based squares and triangles. *Proceedings of the 8th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU'05)*, Lecture Notes in Artificial Intelligence No.3571, L.Godo, editor, pages 563–575, Springer, July 2005.
21. B.Van-Nuffelen, O.Arieli, A.Cortés-Calabuig, M.Bruynooghe. An ID-logic formalization of the composition of autonomous databases. *Proceedings of the 8th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR'05)*, Lecture Notes in Artificial Intelligence No.3662, C.Baral, G.Greco, N.Leone and G.Tarracina, editors, pages 132–144, Springer, September 2005.

22. A.Cortés-Calabuig, M.Denecker, O.Arieli, B.Van-Nuffelen, M.Bruynooghe. On the local closed-world assumption of data-sources. *Proceedings of the 8th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR'05)*, Lecture Notes in Artificial Intelligence No.3662, C.Baral, G.Greco, N.Leone and G.Tarracina, editors, pages 145–157, Springer, September 2005.
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.
25. O.Arieli, M.Denecker, M.Bruynooghe. Distance-based repairs of databases. *Proceedings of the 10th European Conference on Logics in Artificial Intelligence (JELIA'06)*, Lecture Notes in Artificial Intelligence No.4160, M.Fisher et al., editors, pages 43–55, Springer, September 2006.
26. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Representation of partial knowledge and query answering in locally complete databases. *Proceedings of the 13th International Conference on Logic for Programming, Artificial Intelligence and Reasoning (LPAR'06)*, Lecture Notes in Computer Science No.4246, M.Hermann and A.Voronkov, editors, pages 407–421, Springer, November 2006.
27. O.Arieli. Paraconsistent reasoning and distance minimization. *Proceedings of the 3rd Conference on Computability in Europe (CiE'07)*, In: Quaderni del Dipartimento di Scienze Matematiche e Informatiche 'Roberto Magari', Università di Siena, S.B.Cooper, B.Loewe, and A.Sorbi, editors, pages 53–61, June 2007.
28. O.Arieli. Commonsense reasoning by distance semantics. *Proceedings of the 11th Conference on Theoretical Aspects of Rationality and Knowledge (TARK'07)*, D.Samet, editor, pages 33–41, UCL Press, June, 2007.
29. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Approximate query answering in locally closed databases. *Proceedings of the 22nd National Conference on Artificial Intelligence (AAAI'07)*, AAAI Press, pages 397–402, July 2007.
30. O.Arieli. Reasoning with prioritized data by aggregation of distance functions. *Proceedings of the 1st Conference on Artificial General Intelligence (AGI'08)*, Frontiers in Artificial Intelligence, Volume 171, P.Wang, B.Goertzel, and S.Franklin, editors, pages 27–38, IOS Press, March 2008.
31. O.Arieli, A.Zamansky. Distance-based non-deterministic semantics. *Proceedings of the 1st Conference on Artificial General Intelligence (AGI'08)*, Frontiers in Artificial Intelligence, Volume 171, P.Wang, B.Goertzel, and S.Franklin, editors, pages 39–50, IOS Press, March 2008.
32. O.Arieli, A.Zamansky. Some simplified forms of reasoning with distance-based entailments. *Proceedings of the 21st Canadian Conference on Artificial Intelligence (AI'08)*, Lecture Notes in Artificial Intelligence No.5032, S.Bergler, editor, pages 36–47, Springer, May 2008.
33. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Efficient fixpoint methods for approximate query answering in locally complete databases. *Proceedings of LID'2008 – Logic in Databases*, May 2008.
34. O.Arieli, A.Zamansky. Reasoning with uncertainty by Nmatrix–metric semantics. *Proceedings of the 15th Workshop on Logic, Language, Information and Computation (WoLLIC'08)*, Lecture Notes Artificial Intelligence No.5110, W.Hodges and R.de-Queiroz, editors, pages 69–82, Springer, July 2008.
35. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Accuracy and efficiency of fixpoint methods for approximate query answering in locally complete databases. *Proceedings of the 11th International Conference on Principles of Knowledge Representation and Reasoning (KR'08)*, G.Brewka and J.Lang, editors, pages 81–91, AAAI Press, September 2008.

36. O.Arieli, A.Zamansky. Non-deterministic distance semantics for handling incomplete and inconsistent data. *Proceedings of the 10th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU'09)*, Lecture Notes in Artificial Intelligence No.5590, C.Sossai and G.Chemello, editors, pages 793–804, Springer, July 2009.
37. O.Arieli. On the application of the Disjunctive Syllogism in paraconsistent logics based on four states of information. *Proceedings of the 12th International Conference on Principles of Knowledge Representation and Reasoning (KR'10)*, pages 302–309, AAAI Press, May 2010.
38. O.Arieli, A.Avron, A.Zamansky. Maximally paraconsistent three-valued logics. *Proceedings of the 12th International Conference on Principles of Knowledge Representation and Reasoning (KR'10)*, pages 310–318, AAAI Press, May 2010.
39. A.Avron, O.Arieli, A.Zamansky. On strong maximality of paraconsistent finite-valued logics. *Proceedings of the 25th Annual IEEE Symposium on Logic in Computer Science (LICS'10)*, pages 304–313, IEEE Press, July 2010.
40. O.Arieli, A.Zamansky. Similarity-based inconsistency-tolerant logics. *Proceedings of the 12th European Conference on Logics in Artificial Intelligence (JELIA'10)*, Lecture Notes in Artificial Intelligence No.6341, T.Janhunen and I.Niemelä, editors, pages 11–23, Springer, September 2010.
41. O.Arieli, A.Avron, A.Zamansky. What is an ideal logic for reasoning with inconsistency? *Proceedings of the 22nd International Joint Conference on Artificial Intelligence (IJCAI'11)*, T.Walsh, editor, pages 706–711, AAAI Press, July 2011.
42. O.Arieli, A.Zamansky. Inconsistency-tolerance in knowledge-based systems by dissimilarities. *Proceedings of the 7th International Symposium on Foundations of Information and Knowledge Systems (FoIKS'12)*, Lecture Notes in Computer Science No.7153, Th.Lukasiewicz and A.Sali, editors, pages 34–50, Springer, March 2012.
43. O.Arieli, M.W.A.Caminada. A general QBF-based formalization of abstract argumentation theory. *Proceedings of the 4th International Conference on Computational Models of Argument (COMMA'12)*, Frontiers in Artificial Intelligence and Applications Vol.245, B. Verheij, S. Szeider and S. Woltran editors, pages 105–116, IOS Press, September 2012.
44. O.Arieli. Conflict-tolerant semantics for argumentation frameworks. *Proceedings of the 13th European Conference on Logics in Artificial Intelligence (JELIA'12)*, Lecture Notes in Artificial Intelligence No.7519, L.Fariñas del Cerro, A.Herzig and J.Mengin editors, pages 28–40, Springer, September 2012.
45. O.Arieli. Towards constraints handling by conflict tolerance in abstract argumentation frameworks. *Proceedings of the 26th International Florida Artificial Intelligence Research Society Conference (FLAIRS'13), Special Track on Uncertain Reasoning*, Ch.Boonthem-Denecke and G.M.Youngblood, editors, pages 585–560, AAAI Press, May 2013.
46. O.Arieli. A sequent-based representation of logical argumentation. *Proceedings of the 14th International Workshop on Computational Logic in Multi-Agent Systems (CLIMA'13), Special Session on Argumentation Technologies*, J.Leite, T.C.Son, P.Torrioni, L.van der Torre and S. Woltran, editors, Lecture Notes in Artificial Intelligence No.8143, pages 69–85, Springer, September 2013.
47. A.Zamansky, O.Arieli, K.Stefanidis. Context-aware distance semantics for inconsistent database systems. *Proceedings of the 15th International Conference on Information Processing and Management of Uncertainty in Knowledge-Base Systems (IPMU'14) Part II*, Communications in Computer and Information Sciences Volume 443, A.Laurent et al., editors, pages 194–203, Springer, July 2014.
48. C.Sträßer, O.Arieli. Sequent-based argumentation for normative reasoning. *Proceedings of the 12th International Conference on Deontic Logic and Normative Systems (DEON'2014)*, Lecture Notes in Artificial Intelligence No.8554, F.Cariani et at., editors, pages 224–240, Springer, July 2014.

49. O.Arieli, T.Reinstra. Preferential reasoning based on abstract argumentation semantics. *Proceedings of the 5th International Conference on Computational Models of Argument (COMMA'14)*, Frontiers in Artificial Intelligence and Applications Volume 266, S.Parsons et al., editors, pages 77–88, IOS Press, September 2014.
50. O.Arieli, C.Straßer. Dynamic derivations for sequent-based logical argumentation. *Proceedings of the 5th International Conference on Computational Models of Argument (COMMA'14)*, Frontiers in Artificial Intelligence and Applications Vol.266, S.Parsons et al., editors, pages 89–100, IOS Press, September 2014.
51. O.Arieli, C.Straßer. Argumentative approaches to reasoning with maximal consistency. *Proceedings of the 15th International Conference on Principles of Knowledge Representation and Reasoning (KR'16)*, C.Baral, J.Delgrande and F.Wolter, editors, pages 509–512, AAAI Press, April 2016.
52. O.Arieli, A.Avron. Minimal parafinite logics for reasoning with incompleteness and inconsistency. *Proceedings of the 1st International Conference on Formal Structures for Computation and Deduction (FSCD'16)*, D.Kesner and B.Pientka, editors, LIPIcs Volume 52, pages 7:1–7:15, June 2016.
53. O.Arieli, A.Borg, C.Straßer. Argumentative approaches to reasoning with consistent subsets of premises. *Proceedings of the 30th International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems (IEA/AIE'17)*, Lecture Notes in Artificial Intelligence No.10350, S.Benferhat, K.Tabia, and M.Ali., editors, pages 455–465, Springer, June 2017.
54. A.Borg, O.Arieli, C.Straßer. Hypersequent-based argumentation: An instantiation in the relevance logic RM. *Proceedings of the 4th International Workshop on Theory and Applications of Formal Argument (TAFA'17)*, August 2017. Post proceedings (revised selected papers) In: Lecture Notes in Artificial Intelligence No.10757, E.Black, S.Modgil, and N.Oren, editors, pages 17–34, Springer, 2018.
55. J.Heyninck, O.Arieli. On the semantics of simple contrapositive assumption-based argumentation frameworks. *Proceedings of the 2nd Chinese Conference on Logic and Argumentation (CLAR'18)*, June 2018.
56. A.Borg, O.Arieli. Hypersequential argumentation frameworks: An instantiation in the modal logic S5. *Proceedings of the 17th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'18)*, M.Dastani, G.Sukthankar, E.André, and S.Koenig, editors, pages 1097–1104, ACM Press, July 2018.
57. O.Arieli, A.Borg, C.Straßer. Prioritized sequent-based argumentation. *Proceedings of the 17th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'18)*, M.Dastani, G.Sukthankar, E.André, and S.Koenig, editors, pages 1105–1113, ACM Press, July 2018.
58. J.Heyninck, O.Arieli. On the semantics of simple contrapositive assumption-based argumentation frameworks. *Proceedings of the 7th International Conference on Computational Models of Argument (COMMA'18)*, Frontiers in Artificial Intelligence and Applications Vol.305, S.Modgil, K.Budzynska, and J.Lawrence, editors, pages 9–20, IOS Press, September 2018.
59. J.Heyninck, O.Arieli. Simple contrapositive assumption-based frameworks - Extended abstract. *Proceedings of the 18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'19)*, N.Agmon, M.Taylor, E.Elkind and M.Veloso, editors, pages 2018–2020, ACM Press, May 2019.
60. J.Heyninck, O.Arieli. Simple contrapositive assumption-based frameworks. *Proceedings of the 15th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR'19)*, Lecture Notes in Computer Science No.11481, M.Balduccini, Y.Lierler and S.Woltran, editors, pages 75–88, Springer, June 2019.
61. J.Heyninck, O.Arieli. An argumentative characterization of disjunctive logic programming. *Proceedings of the 19th EPIA Conference on Artificial Intelligence (EPIA'19)*, Lecture Notes in Artificial Intelligence No.11805, P. Moura Oliveira et al. editors, pages 526–538, Springer, September 2019.

62. O.Arieli, A.Borg, C.Straßer. Tuning logical argumentation frameworks: A postulate-derived approach. *Proceedings of the 33rd International Florida Artificial Intelligence Research Society Conference (FLAIRS-33)*, Special Track on Uncertain Reasoning, pages 557–562, AAAI Press, May 2020.
63. O.Arieli, J.Heyninck. Prioritized simple contrapositive assumption-based frameworks. *Proceedings of the 24th European Conference on Artificial Intelligence (ECAI'20)*, Frontiers in Artificial Intelligence and Applications Vol.325, G.De Giacomo et al., editors, pages 608–615. IOS Press, August 2020.
64. O.Arieli, C.Straßer. On minimality and consistency tolerance in logical argumentation frameworks. *Proceedings of the 8th International Conference on Computational Models of Argument (COMMA'20)*, Frontiers in Artificial Intelligence and Applications Vol.326, IOS press, H.Prakken et al., editors, pages 91–102, IOS Press, September 2020.
65. J.Heyninck, O.Arieli. Argumentative reflections of approximation fixpoint theory. *Proceedings of the 8th International Conference on Computational Models of Argument (COMMA'20)*, Frontiers in Artificial Intelligence and Applications Vol.326, IOS press, H.Prakken et al., editors, pages 215–226, IOS Press, September 2020.
66. O.Arieli, A.Borg, C.Straßer. Characterizations and classifications of argumentative entailments. *Proceedings of the 18th International Conference on Knowledge Representation and Reasoning (KR'21)*, pages 52–62, M.Bienvenu, G.Lakemeyer and E.Erdem, editors, IJCAI Organization, November 2021.
67. J.Heyninck, O.Arieli. Approximation fixpoint theory for non-deterministic operators and its application in disjunctive logic programming. *Proceedings of the 18th International Conference on Knowledge Representation and Reasoning (KR'21)*, pages 334–344, M.Bienvenu, G.Lakemeyer and E.Erdem, editors, IJCAI Organization, November 2021.
68. O.Arieli, K.van Berkel, C.Straßer. Annotated sequent calculi for paraconsistent reasoning and their relations to logical argumentation. *Proceedings of the 31st International Joint Conference on Artificial Intelligence (IJCAI'22)*, L.De Raedt, editor, pages 2532–2538, ijcai.org, July 2022.
69. O.Arieli, A.Borg, M.Hesse, C.Straßer. Abductive reasoning with sequent-based argumentation (Extended abstract). *Proceedings of the 20th International Workshop on Non-Monotonic Reasoning (NMR'22)*, CEUR Workshop Proceedings No.3197, O.Arieli, G.Casini and L.Giordano, editors, pages 143–146, CEUR-WS.org, August 2022.
70. O.Arieli, A.Borg, M.Hesse, C.Straßer. Explainable logic-based argumentation. *Proceedings of the 9th International Conference on Computational Models of Argument (COMMA'22)*, Frontiers in Artificial Intelligence and Applications Vol.353, F.Toni et al., editors, pages 32–43, IOS press, September 2022.
71. O.Arieli, J.Heyninck. Simple contrapositive assumption-based argumentation with partially-ordered preferences *Proceedings of the 20th International Conference on Knowledge Representation and Reasoning (KR'23)*, pages 55–64, P.Marquis, T.Cao Son and G.Kern-Isberner, editors, IJCAI.org, September 2023.
72. O.Arieli, K.van Berkel, C.Straßer. Defeasible normative reasoning: A proof-theoretic integration of logical argumentation, *Proceeding of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI'24)*, M.Wooldridge, J.Dy and S.Natarajan, editors, pages 10450–10458, AAAI Press, February, 2024.
73. O.Arieli, J.Heyninck. Collective attacks in assumption-based argumentation. *Proceedings of the 39th ACM/SIGAPP Symposium On Applied Computing (SAC'24)*, Knowledge Representation and Reasoning Track, pages 746–753, April 2024.
74. J.Heyninck, O.Arieli. Semantics for non-flat assumption-based argumentation, revisited. *Proceedings of the 33rd International Joint Conference on Artificial Intelligence (IJCAI'24)*, pages 3413–3420, ijcai.org, August 2024.
75. O.Arieli, K.van Berkel, B.Raddaoui, C.Strasser. Deontic reasoning based on inconsistency measures. *Proceedings of the 21st International Conference on Knowledge Representation and Reasoning (KR'24)*, pages 71–81, November 2024

Book Chapters

1. O. Arieli, C. Cornelis, G. Deschrijver, E. E. Kerre. Relating intuitionistic fuzzy sets and interval-valued fuzzy sets through bilattices. In: *Applied Computational Intelligence*. D. Ruan, P. D'hondt, M. De Cock, M. Nachtgaele, and E.E.Kerre, editors, World Scientific, pages 57–64, 2004.
2. O.Arieli, A.Zamansky. Introduction: Non-classical Logics – Between Semantics and Proof Theory (In Relation to Arnon Avron’s Work) In: *Arnon Avron on Semantics and Proof Theory of Non-Classical Logics*, Volume 21 of Outstanding Contributions to Logic, pages 1–11, O.Arieli and A.Zamansky, editors, Springer, 2021.
3. O.Arieli, A.Borg, J.Heyninck, C.Straßer. Logic-Based Approaches to Formal Argumentation. In: Chapter 12 of the *Handbook of Formal Argumentation*, Volume II, D.Gabbay, M.Giacomin, G.Simari, M.Thimm, editors, College Publications, 2021.
4. O.Arieli. Four-valued semantics for abstract argumentation frameworks using (extensions of) Dunn–Belnap four-valued logic. In: *Relevance Logics and other Tools for Reasoning: Essays in Honor of J. Michael Dunn*, K.Bimbó, editor, Volume 46 of Tributes, pages 31–53, College Publications, 2022.

Editorship, Books

1. O.Arieli, A.Zamansk (eds). *Arnon Avron on Semantics and Proof Theory of Non-Classical Logics*. Outstanding Contributions to Logic, volume 21, Springer, 2021 (ISBN: 978-3-030-71258-7).

Editorship, Journal Special Issues

1. O.Arieli, B.Konikowska, A.Rabinovich, A.Zamansky (eds). *Journal of Logic and Computation, Special Issue for IsraLog’11, on: Logic – Between Semantics and Proof Theory (in honor of A.Avron’s 60th Birthday)*, Volume 26, Issue 1, February 2016.
2. O.Arieli, A.Zamansky (eds). *The Logic Journal of the Interest Group in Pure and Applied Logics (IGPL), Special Issue for IsraLog’14*, Volume 24, Number 3, June 2016.
3. O.Arieli, A.Zamansky (eds). *Journal of Applied Logic, Special Issue for IsraLog’17*, Volume 6, Number 2, March 2019.

Editorship, Conference Proceedings

1. O.Arieli, G.Casini, L.Giordano (eds). *Proceedings of the 20th International Workshop on Non-Monotonic Reasoning (NMR’2022)*, CEUR Workshop Proceedings, Volume 3197, CEUR-WS.org, August 2022.
2. O.Arieli, M.Homola, J.C.Jung, M.Mugnier: (eds). *Proceedings of the 35th International Workshop on Description Logics (DL’2022)*, CEUR Workshop Proceedings, Volume 3263, CEUR-WS.org, August 2022.

Abstracts or Unpublished Presentations in Scientific Meetings

1. O.Arieli, A.Avron. Bilattices and paraconsistency. *First World Congress on Paraconsistency (WCP’97)*, Ghent, Belgium, August 1997.
2. O.Arieli, A.Avron. Using four values for computerized reasoning. *The 1998 Annual Conference of the European Association for Computer Science Logic (CSL’98)*. Brno, Czech Republic, August 1998.

3. O.Arieli. Four-valued logics for reasoning with uncertainty. *The Benelux Workshop on Computational Logic* (BenCl'2000), Peer, Belgium, May 2000 (Abstract in Technical Report No. CW290, H.Vandecasteele and M.Bruynooghe, editors, Department of Computer Science, University of Leuven, May 2000).
4. O.Arieli. Database integration: preferential semantics and abductive reasoning. *Dagstuhl Seminar No.03241 on Inconsistency Tolerance in Database, Knowledge-bases, and Software Systems*, Schloss Dagstuhl, Wadern, Germany, June 2003. <ftp://ftp.dagstuhl.de/pub/Proceedings/03/03141/>.
5. A.Cortés-Calabuig, M.Denecker, O.Arieli, B.Van-Nuffelen, M.Bruynooghe. On the local closed-world assumption of data-sources. *Biennial Israeli Symposium on the Foundations of Artificial Intelligence* (BISFAI'05), Haifa, Israel, June 2005.
6. B.Van-Nuffelen, M.Denecker, O.Arieli, A.Cortés-Calabuig, M.Bruynooghe. An ID-logic formalization of the composition of autonomous databases. *Biennial Israeli Symposium on the Foundations of Artificial Intelligence* (BISFAI'05), Haifa, Israel, June 2005.
7. A.Cortés-Calabuig, M.Denecker, O.Arieli, B.Van-Nuffelen, M.Bruynooghe. On the local closed-world assumption of data-sources. *Proceedings of the 17th Belgian-Dutch Conference on Artificial Intelligence* (BNAIC'05), Brussels, Belgium, BNVKI Association, pages 333–334, October 2005.
8. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Representation of partial knowledge and reasoning in locally complete databases. *The Second International Workshop on Exchange and Integration of Data* (EID'06), Brixen-Bressanone, Italy, June 2006.
9. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Using deductive databases technology for approximate query answering in partially complete databases. *Dutch-Belgian DataBase Day* (DBDBD-07), Eindhoven, The Netherlands, November 2007.
10. A.Cortés-Calabuig, M.Denecker, O.Arieli, M.Bruynooghe. Approximate query answering in locally closed databases. *Proceedings of the 19th Belgian-Dutch Conference on Artificial Intelligence* (BNAIC'07), Utrecht, The Netherlands, pages 339–340, November 2007.
11. O.Arieli, A.Zamansky. Non-deterministic distance semantics for handling incomplete and inconsistent data. *10th Biennial Israeli Symposium on the Foundations of Artificial Intelligence* (BISFAI'09), Ramat-Gan, Israel, June 2009.
12. O.Arieli, A.Avron, A.Zamansky. All natural three-valued paraconsistent logics are maximal. *The 3rd World Congress on Universal Logic* (UniLog'2010), *Special Session on Negation*. Lisbon, Portugal, April 2010.
13. O.Arieli. A tutorial on bilattices. *Research Workshop on Duality Theory in Algebra, Logic and Computer Science* (Invited Tutorial), Oxford, UK, June 2012.
14. O.Arieli, A.Zamansky. A dissimilarity-based approach to handling inconsistency in non-truth-functional logics. *The 4th World Congress on Universal Logic* (UniLog'2013), *Workshop on Compositional Meaning in Logic*. Rio, Brazil, March 2013.
15. A.Zamansky, O.Arieli, K. Stefanidis. Inconsistency management based on relevance degrees. *35th Linz Seminar on Fuzzy Set Theory*. Linz, Austria, February 2014. (Abstract in: Proceedings of the 35th Linz Seminar on Fuzzy Set Theory, T.Flamínio, L.Godo, S.Gottwald and E.Klement, editors, pages 136–137, Johannes Kepler Universität, A-4040 Linz, February 2014).
16. O.Arieli, K. Stefanidis, A.Zamansky. Combining non-determinism and context awareness in consistency restoration systems. *The 2nd Workshop on Compositional Meaning in Logic* (GeTFun 2.0) Vienna Summer of Logic, Vienna, Austria, July 2014.
17. O.Arieli, C.Sträßer. Sequent-based logical argumentation. *The 2nd Israeli Workshop on Non-Classical Logics and Their Applications* (IsraLog'14), Haifa, Israel, September 2014.

18. O.Arieli. Desirable properties of paraconsistent logics. *Dagstuhl Seminar 15211: Multi-disciplinary approaches to reasoning with imperfect information and knowledge – a synthesis and a roadmap of challenges*. Dagstuhl Castle, Wadern, Germany, May 2015.
19. O.Arieli, C.Straßer. Sequent-based logical argumentation. *The 10th Workshop on Logical and Semantic Frameworks with Applications (LFSA'15)*, Natal, Brazil, September 2015. (Invited Talk)
20. O.Arieli, A.Avron. Parafinite logics for reasoning with incompleteness and inconsistency. *The 3rd Workshop on Compositional Meaning in Logic (GeTFun 3.0)*. Natal, Brazil, September 2015.
21. O.Arieli, A.Avron. Parafinite logics for reasoning with incompleteness and inconsistency. *The 4th Workshop on Compositional Meaning in Logic (GeTFun 4.0)*. Coimbra, Portugal, July 2016.
22. O.Arieli, A.Avron. Four-valued parafinite logics. *The 2nd Prague Seminar on Paraconsistent Logics*. Prague, The Czech Republic, June 2017.
23. A.Borg, O.Arieli, C.Straßer. Hypersequent-based argumentation: An instantiation in the relevance logic RM. *The 3rd Israeli Workshop on Non-Classical Logics and Their Applications (IsraLog'17)*, Haifa, Israel, October 2017.
24. O.Arieli, A.Bong, C.Straßer. Reasoning with maximal consistency by argumentative approaches. *The 3rd Madeira Workshop on Belief Revision, Argumentation, Ontologies, and Norms (BRAON'17)*, Madeira, Portugal, November 2017.
25. A.Borg, O.Arieli. Hypersequent-based argumentation: An instantiation in the modal logic S5. *The 6th World Congress on Universal Logics (UniLog'18)*, Vichy, France, June 2018.
26. O.Arieli. Structured argumentation frameworks and reasoning with maximal consistency. *Workshop on Bridging the Gap between Formal Argumentation and Actual Human Reasoning* (invited keynote) Bochum, Germany, October 2018.
27. O.Arieli, A.Bong, C.Straßer. Properties of argumentation frameworks: A proof-theoretical study. *The 3rd European Conference on Argumentation (ECA'19)*, Groningen, The Netherlands, June 2019.
28. O.Arieli. Sequent-based argumentation frameworks: Some recent results. *Workshop on Logic & Argumentation*, Technical University Vienna, November 2019.
29. O.Arieli, A.Bong, C.Straßer. Logic-Based Approaches to Formal Argumentation: Chapter presentation of the second volume of HoFA. *Current Trends in Formal Argumentation* Bertinoro, Italy, November 2019.
30. O.Arieli. Sequent-based deductive argumentation. Research seminar of the logic group, Department of Philosophy, University of Milan, Online, April 2020.
31. O.Arieli. What is an argument? Consistency, minimality, and meta-linguistic considerations. *The 3rd workshop on argument strength*, Keynote talk, Online, October 2021.
32. O.Arieli, C.Straßer. Proof-theoretic approaches to logical argumentation. *The 18th International Conference on Principles of Knowledge Representation and Reasoning (KR'2021)*, Tutorial, Online, November 2021.
33. O.Arieli. Argumentation-based approaches to paraconsistency. *São Paulo School of Advanced Science on Contemporary Logic, Rationality and Information (SPLoC'2023)*, Course, University of Campinas, Campinas, Brazil, February 2023.

Thesis

1. O.Arieli. *Multiple-valued logics for reasoning with uncertainty*. Ph.D. Dissertation. Department of Computer Science, Tel-Aviv University, April 1999.