

List of Publications¹

Susanne Saminger-Platz

The publications are grouped according to categories. Within these categories, the papers are in chronological order starting with the most recent publications.

Books and Edited Volumes

1. S. Saminger-Platz, R. Mesiar, (Eds.) *On Logical, Algebraic, and Probabilistic Aspects of Fuzzy Set Theory*. Series: Studies in Fuzziness and Soft Computing, Vol. 336. Springer Verlag, Berlin Heidelberg, 2016. ISBN 978-3-319-28807-9. 262 pages
2. S. Saminger, *Aggregation in Evaluation of Computer-Assisted Assessment*. Volume C 44 of Schriftenreihe der Johannes-Kepler-Universität Linz. Universitätsverlag Rudolf Trauner, 2005. ISBN 3-85487-782-X. 142 pages

Papers in Refereed International Journals

1. M. Dibala, S. Saminger-Platz, R. Mesiar, E.P. Klement. Defects and transformations of quasi-copulas, submitted.
2. S. Saminger-Platz, M. Dibala, R. Mesiar, E.P. Klement. Ordinal sums of binary conjunctive operations based on the product. submitted.
3. E.P. Klement, A. Kolesárová, R. Mesiar, S. Saminger-Platz. On the role of ultramodularity and Schur concavity in the construction of binary copulas. *Journal of Mathematical Inequalities*, submitted.
4. S. Jenei, S. Saminger-Platz. Co-rotation-annihilation of residuated semigroups. *Fuzzy Sets and Systems*, vol. 292, pp. 296–306, 2016. (doi:10.1016/j.fss.2015.03.017).
5. F. Serdio Fernández, M. Muñoz-Garica, S. Saminger-Platz. Detecting clipping in photovoltaic solar plants using fuzzy systems on the feature space. *Solar Energy*, vol. 132, pp. 345–356, 2016.
6. L. Běhounek, U. Bodenhofer, P. Cintula, S. Saminger-Platz, P. Sarkoci. Graded dominance and related graded properties of fuzzy connectives. *Fuzzy Sets and Systems*, vol. 262, pp. 78–101, 2015 (doi:10.1016/j.fss.2014.04.025).
7. M. Kauers, V. Pillwein, S. Saminger-Platz. Dominance in the family of Sugeno-Weber t-norms. *Fuzzy Sets and Systems*, vol. 181, pp. 74–87, 2011.
8. S. Saminger-Platz, C. Sempi. A primer on triangle functions II. *Aequationes Mathematicae*, vol. 80, pp. 239–268, 2010.
9. S. Saminger-Platz, B. De Baets, H. De Meyer. Differential inequality conditions for dominance between continuous Archimedean t-norms. *Mathematical Inequalities & Applications*, vol. 12, pp. 191–208, 2009.
10. S. Saminger-Platz. The dominance relation in some families of continuous Archimedean t-norms and copulas. *Fuzzy Sets and Systems*, vol. 160, pp. 2017–2031, 2009 (doi:10.1016/j.fss.2008.12.009).
11. F. Durante, S. Saminger-Platz, P. Sarkoci. Rectangular patchwork for bivariate copulas and tail dependence. *Communications in Statistics — Theory and Methods*, vol. 38, pp. 2515–2527, 2009.
12. J.J. Quesada-Molina, S. Saminger-Platz, C. Sempi. Quasi-copulas with a given sub-diagonal section. *Nonlinear Analysis*, vol. 69, pp. 4654–4673, 2008 (doi:10.1016/j.na.2007.11.021).

¹by April 2016

13. S. Saminger-Platz, E. P. Klement, R. Mesiar. On extensions of triangular norms on bounded lattices. *Indagationes Mathematicae*, vol. 19, no. 1, pp. 135–150, 2008.
14. S. Saminger-Platz, C. Sempì. A primer on triangle functions I. *Aequationes Mathematicae*, vol. 76, pp. 201–240, 2008.
15. F. Durante, S. Saminger-Platz, P. Sarkoci. On representations of 2-increasing binary aggregation functions. *Information Sciences*, vol. 178, pp. 4634–4541, 2008.
16. S. Saminger-Platz, B. De Baets, H. De Meyer. A generalization of the Mulholland inequality for continuous Archimedean t-norms. *Journal of Mathematical Analysis and Applications*, vol. 345, pp. 607–614, 2008 (doi:10.1016/j.jmaa.2008.03.045).
17. S. Saminger-Platz, R. Mesiar, D. Dubois. Aggregation Operators and Commuting. *IEEE Transactions on Fuzzy Systems*, vol. 15, no. 6, pp. 1032–1045, 2007 (doi:10.1109/TFUZZ.2006.890687).
18. K. Maes, S. Saminger, B. De Baets. Representation and construction of self-dual aggregation operators. *European Journal of Operation Research*, vol. 177, pp. 472–487, 2007.
19. S. Saminger, B. De Baets, H. De Meyer. On the dominance relation between ordinal sums of conjunctors. *Kybernetika*, vol. 42, no. 2, pp. 337–350, 2006.
20. S. Saminger. On ordinal sums of triangular norms on bounded lattices. *Fuzzy Sets and Systems*, vol. 157, no. 10, pp. 1403–1416, 2006.
21. R. Mesiar and S. Saminger. Domination of ordered weighted averaging operators over t-norms. *Soft Computing*, vol. 8, pp. 562–570, 2004.
22. S. Saminger and R. Mesiar. A general approach to decomposable bi-capacities. *Kybernetika*, vol. 39, no. 5, pp. 631–642, 2003.
23. S. Saminger, R. Mesiar, and U. Bodenhofer. Domination of aggregation operators and preservation of transitivity. *Internat. J. Uncertain. Fuzziness Knowledge-Based Systems*, vol. 10/s, pp. 11–35, 2002.
24. S. Saminger. A short review on concepts of similarity. *Journal of Electrical Engineering*, vol-52(10/s), pp. 12–14, 2001.

Contributions to Edited Volumes

1. E.P. Klement, R. Mesiar, A. Mesiarová-Zemánková, and S. Saminger-Platz. Logical connectives for granular computing In W. Pedrycz, A. Skowron, and V. Kreinovich, editors. *Handbook of Granular Computing* John Wiley & Sons, Chichester, pp. 205–224, 2008.
2. S. Saminger, P. Sarkoci, B. De Baets. The dominance relation on the class of continuous ordinal sum t-norms. In H.C.M. de Swart, E. Orłowska, M. Roubens, and G. Schmidt, editors, *Theory and Applications of Relational Structures as Knowledge Instruments II*, Lecture Notes in Computer Science, pp. 337–357. Springer, 2006.
3. S. Saminger, U. Bodenhofer, E.P. Klement, and R. Mesiar. Aggregation of fuzzy relations and preservation of transitivity. In H.C.M. de Swart, E. Orłowska, M. Roubens, and G. Schmidt, editors, *Theory and Applications of Relational Structures as Knowledge Instruments II*, Lecture Notes in Computer Science, pp. 187–208. Springer, 2006.
4. U. Bodenhofer, J. Küng, S. Saminger. Flexible query answering using distancebased fuzzy relations. In H.C.M. de Swart, E. Orłowska, M. Roubens, and G. Schmidt, editors, *Theory and Applications of Relational Structures as Knowledge Instruments II*, Lecture Notes in Computer Science, pp. 209–230. Springer, 2006.

Papers in Proceedings of Conferences with Peer Review

1. C. Zavoianu, E. Lughofer, G. Bramerdorfer, W. Amrhein, S. Saminger-Platz. A surrogate-based strategy for multi-objective tolerance analysis in electrical machine design. In *Proceedings of the 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2015), Timisoara (Romania)*, IEEE Computer Society Conference Publishing Services (CPS), pp. 195–203, 2016. (doi: 10.1109/SYNASC.2015.39)
2. O. Bello, F. Serdio Fernández, C. Teodoriu, J. Oppelt S. Saminger-Platz, Novel application of Fuzzy Logic (FL) method for drilling rig selection. In *Abstracts of the Abu Dhabi International Petroleum Exhibition and Conference, Abu Dhabi (UAE)*, 2015, 19 pages.
3. F. Durante, S. Saminger-Platz. An aggregation procedure for assessing scientific research. In *Proceedings of the 5th International Summer School on Aggregation Operators, Benevento (Italy)*. pp. 165–168, 2011.
4. L. Běhounek, P. Cintula, U. Bodenhofer, S. Saminger-Platz, P. Sarkoci. On a graded notion of t-norm and dominance. In *Proceedings of the 40th IEEE International Symposium on Multiple-Valued Logics (ISMVL 2010), Barcelona (Spain)*. pp. 73–76, 2010.
5. F. Durante, S. Saminger-Platz, P. Sarkoci. On patchwork techniques for 2-increasing aggregation functions and copulas. In *Soft methods for handling variability and imprecision*, (D. Dubois, M.A. Lubiano, H. Prade, M.Á. Gil, P. Grzegorzewski, and O. Hryniewicz, Eds.), Advances in Soft Computing, Springer, Berlin, 2008, pp. 349–356. *Proceedings of the 4th Int. Conf. on Soft Methods in Probability and Statistics, Toulouse (France)*, 2008.
6. S. Saminger, P. Sarkoci. Dominance of ordinal sums of T_L and T_P . In *Proceedings of the 5th Int. Conf. in Fuzzy Logic and Technology, Vol. I, Ostrava (Czech Republic)*. pp. 35–39, 2007.
7. S. Saminger, B. De Baets, H. De Meyer. Mulholland’s inequality and differential conditions for strict t-norms. In *Proceedings of 4th International Summer School on Aggregation Operators, Ghent (Belgium)*. pp. 71–76, 2007.
8. G. Mayrhofer, S. Saminger, W. Windsteiger. CreaComp: Computer-supported experiments and automated proving in learning and teaching mathematics. In *Proceedings of the 8th International Conference on Technology in Mathematics Teaching, Hradec Kralov (Czech Republic)*. 5 pages 2007.
9. G. Mayrhofer, S. Saminger, W. Windsteiger. CreaComp: Experimental Formal Mathematics for the Classroom. In *Symbolic Computation and Education S.Li, D. Wang, J.-Z. Zhang (Eds.)*, World Scientific Publishing Co, Singapore, New Jersey, pp. 94–114, 2007.
10. S. Saminger, E. P. Klement, R. Mesiar. A note on ordinal sums of t-norms and t-subnorms on bounded lattices. In *Proceedings of 11th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, Paris (France)*. pp. 664–670, 2006.
11. E. P. Klement, R. Mesiar, S. Saminger. Remarks on residuated lattices. In *Proceedings of International conference “The Logic of Soft Computing IV” and Fourth workshop of the ERCIM working group on soft computing, Ostrava (Czech Republic)*, pp. 13–18, 2005.
12. S. Saminger, B. De Baets, H. De Meyer. The domination relation between continuous t-norms. In *Proceedings of Joint 4th Int. Conf. in Fuzzy Logic and Technology and 11th French Days on Fuzzy Logic and Applications, Barcelona (Spain)*. pp. 247–252, 2005.
13. S. Saminger, E. P. Klement, R. Mesiar. A note on ordinal sums of t-norms on bounded lattices. In *Proceedings of Joint 4th Int. Conf. in Fuzzy Logic and Technology and 11th French Days on Fuzzy Logic and Applications, Barcelona (Spain)*. pp. 385–388, 2005.

14. K. Maes, S. Saminger, B. De Baets. On the characterization of self-dual aggregation operators. In *Proceedings of Joint 4th Int. Conf. in Fuzzy Logic and Technology and 11th French Days on Fuzzy Logic and Applications, Barcelona (Spain)*. pp. 159–164, 2005.
15. S. Saminger, K. Maes, B. De Baets. Aggregation of T -transitive reciprocal relations. In *Proceedings of Summer School on Aggregation Operators, Università della Svizzera italiana, Lugano (Swiss)*. pp. 113–118, 2005.
16. S. Saminger. Aggregation of bi-capacities. In *Proceedings of 10th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, Perugia (Italy)*, pp. 335–342, 2004.
17. R. Mesiar and S. Saminger. Commuting operators. In *Proceedings of 3rd International Conference in Fuzzy Logic and Technology, Zittau (Germany)*, pp. 308–311, 2003.
18. R. Mesiar and S. Saminger. Decomposable bi-capacities. In *Proceedings of International Summer School on Aggregation Operators and their Applications, Alcalá de Henares (Spain)*, pp. 155–158, 2003.
19. S. Saminger. MeetMATH — visualizations and animations in a didactic framework. In: M. Borovcnik und H. Kautschitsch (Hrsg.), *Technology in Mathematics Teaching (Special groups and working groups). Proceedings of ICTMT 5, Klagenfurt (Austria)*, Band 26 der Schriftenreihe Didaktik der Mathematik, pp. 217–222, öbv & hpt Verlagsgesellschaft, 2002.

Abstracts

1. E.P. Klement, A. Kolesárová, R. Mesiar, S. Saminger-Platz. Some functional equations involving 1-Lipschitz aggregation functions and their duals. In *Proceedings of 36th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 57–61, 2016.
2. E.P. Klement, A. Kolesárová, R. Mesiar, S. Saminger-Platz. Ultramodularity in the construction of binary copulas. In *Proceedings of 12th Workshop on Stochastic Models, Statistics and Their Applications, Wrocław (Poland)*, pp. 54–55, 2015.
3. E.P. Klement, A. Kolesárová, R. Mesiar, S. Saminger-Platz. A functional equation involving (quasi-) copulas and their duals. In *Proceedings of 35th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 83–85, 2014.
4. S. Saminger-Platz. Triangle Functions — Constructions and Functional (In)equalities. In *Abstracts of the 12th International Conference on Fuzzy Sets Theory and its Applications (FSTA 2014), Liptovsky Jan (Slovakia)*, pp. 15, 2014.
5. S. Saminger-Platz. On the functional inequality of dominance. In *Abstracts of 49th International Symposium on Functional Equations, Graz-Mariatrost (Austria)*, p. 20, 2011; see also *Report of Meeting: The Fourty-ninth International Symposium on Functional Equations, June 19–26, 2011, Graz-Mariatrost, Austria*, *Aequationes Mathematicae*, Vol. 84(3), pp. 285–318, 2012.
6. F. Durante, S. Saminger-Platz, P. Sarkoci. Patchwork techniques for constructing bivariate copulas. In *Abstracts of the First Summer School on Copulas, Linz (Austria)*, pp. 36–37, 2008.
7. S. Saminger-Platz, E.P. Klement, R. Mesiar. On extensions of monotone commutative monoids on bounded lattices. In *Abstracts of the 76th Workshop on General Algebra, Linz (Austria)*, p. 7, 2008.
8. S. Saminger-Platz, E.P. Klement, R. Mesiar. Bounded lattices, complete sublattices, and extensions of t -norms. In *Proceedings of 29th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 96–97, 2008.

9. L. Běhounek, U. Bodenhofer, P. Cintula, S. Saminger-Platz. Graded Dominance. In *Proceedings of 29th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 11–14, 2008.
10. S. Saminger-Platz. Triangle functions — what they are and what they are good for?. In *Abstracts of the 9th International Conference on Fuzzy Sets Theory and its Applications (FSTA 2008), Liptovský Jan (Slovakia)*, pp. 16–17, 2008.
11. J.J. Quesada-Molina, S. Saminger, C. Sempi. Quasi-copulas with given sub-diagonal sections. In *Abstracts of the 6th Conference on Multivariate Distributions with Fixed Marginals*, p. 68, 2007.
12. S. Saminger. On constructions and boundaries of some type of 2-increasing functions. In *Abstracts of the 6th Conference on Multivariate Distributions with Fixed Marginals*, pp. 75–76, 2007.
13. J.J. Quesada Molina, S. Saminger, C. Sempi. Symmetric copulas with given sub-diagonal sections. In *Proceedings of 28th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 89–90, 2007.
14. S. Saminger, C. Sempi. Triangle functions — a way to bridge gaps?. In *Proceedings of 28th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 102–103, 2007.
15. S. Saminger, D. Dubois, R. Mesiar. On consensus functions in the bipolar case. In *Proceedings of 27th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 116–119, 2006.
16. S. Saminger. Aggregation of extensional hulls and domination. In *Abstracts of 7th International Conference on Fuzzy Sets Theory and its Applications (FSTA 2004), Liptovský Ján (Slovakia)*, pp. 92–93, 2004.
17. S. Saminger. Special operators dominating continuous Archimedean t-norms. In *Proceedings of 24th Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 84–87, 2003.
18. S. Saminger, U. Bodenhofer. Aggregation in evaluation of multiple-response-questions. In *Abstracts of 6th International Conference on Fuzzy Sets Theory and its Applications (FSTA 2002), Liptovský Ján (Slovakia)*, pp. 110–111, 2002.
19. U. Bodenhofer, S. Saminger. Transitivity-preserving aggregation of fuzzy relations. In *Abstracts of 6th International Conference on Fuzzy Sets Theory and its Applications (FSTA 2002), Liptovský Ján (Slovakia)*, pp. 36–37, 2002.
20. S. Saminger. T -transitivity and domination. In *Proceedings of 23rd Linz Seminar on Fuzzy Set Theory, Linz (Austria)*, pp. 55–59, 2002.

Theses

1. S. Saminger-Platz, *Aggregation Functions — Constructions, Characterizations, and Functional Equations*. Habilitation Thesis, Johannes Kepler Universität Linz, January 2009. 324 pages.
2. S. Saminger, *Aggregation in Evaluation of Computer-Assisted Assessment*. PhD Thesis, Johannes Kepler Universität Linz, September 2003. 110 pages.
3. S. Saminger, *Charakterisierung vulkanischer Glasaschen mittels Vergleichender Neutronenaktivierungsanalyse und Elektronenstrahlmikrosondenanalyse*, Master's Thesis, Technical University Vienna, December 1999. 140 pages.

Editorial Work

- F. Durante, R. Mesiar, and S. Saminger-Platz. Editorial to the special issue devoted to “Copulas, measures and integrals”. *Inform. Sci.*, 179(17):2861–2862, 2009.
- U. Bodenhofer, B. De Baets, E. P. Klement, and S. Saminger-Platz, editors. The Legacy of 30 Seminars — Where Do We Stand and Where Do We Go? Abstracts of the 30th Linz Seminar on Fuzzy Set Theory. Johannes Kepler University Linz 2009.