

List of Publications of Fabrizio Durante

The publications are grouped according to categories. Within these categories, the articles are listed in chronological order starting with the oldest publication.

Edited Volume

- [1] P. Jaworski, F. Durante, W. Härdle, and T. Rychlik, editors. *Workshop on Copula Theory and its Applications*. Lecture Notes in Statistics - Proceedings. Springer, Berlin/Heidelberg, 327 pages, 2010.

Papers in Refereed International Journals ¹

- [1] F. Durante. Generalized composition of binary aggregation operators. *Internat. J. Uncertain. Fuzziness Knowledge-Based Systems*, 13(6):567–577, 2005.
- [2] F. Durante. Solution of an open problem for associative copulas. *Fuzzy Sets and Systems*, 152(2):411–415, 2005.
- [3] F. Durante and C. Sempi. Copula and semicopula transforms. *Int. J. Math. Math. Sci.*, 2005(4):645–655, 2005.
- [4] F. Durante and C. Sempi. Semicopulae. *Kybernetika (Prague)*, 41(3):315–328, 2005.
- [5] F. Durante. A new class of symmetric bivariate copulas. *J. Nonparametr. Stat.*, 18(7-8):499–510, 2006.
- [6] F. Durante, R. Mesiar, and C. Sempi. On a family of copulas constructed from the diagonal section. *Soft Computing*, 10(6):490–494, 2006.
- [7] F. Durante, J.J. Quesada-Molina, and C. Sempi. Semicopulas: characterizations and applicability. *Kybernetika (Prague)*, 42(3):287–302, 2006.
- [8] F. Durante and C. Sempi. On the characterization of a class of binary operations on bivariate distribution functions. *Publ. Math. Debrecen*, 69(1-2):47–63, 2006.
- [9] F. Durante. A new family of symmetric bivariate copulas. *C.R. Math. Acad. Sci. Paris*, 344(3):195–198, 2007.
- [10] F. Durante, E.P. Klement, R. Mesiar, and C. Sempi. Conjunctors and their residual implicators: characterizations and construction methods. *Mediterr. J. Math.*, 4(3):343–356, 2007.
- [11] F. Durante, E.P. Klement, J.J. Quesada-Molina, and P. Sarkoci. Remarks on two product-like constructions for copulas. *Kybernetika (Prague)*, 43(2):235–244, 2007.
- [12] F. Durante, A. Kolesárová, R. Mesiar, and C. Sempi. Copulas with given diagonal sections: novel constructions and applications. *Internat. J. Uncertain. Fuzziness Knowledge-Based Systems*, 15(4):397–410, 2007.
- [13] F. Durante, A. Kolesárová, R. Mesiar, and C. Sempi. Copulas with given values on a horizontal and a vertical section. *Kybernetika (Prague)*, 43(2):209–220, 2007.
- [14] F. Durante, R. Mesiar, P.-L. Papini, and C. Sempi. 2-increasing binary aggregation operators. *Inform. Sci.*, 177(1):111–129, 2007.

¹All the articles in this category (except for [3]) are published in journals that are indexed in Thomson Reuter's Journal Citation Reports.

- [15] F. Durante and P.-L. Papini. A weakening of Schur–concavity for copulas. *Fuzzy Sets and Systems*, 158(12):1378–1383, 2007.
- [16] F. Durante, J.J. Quesada-Molina, and C. Sempi. A generalization of the Archimedean class of bivariate copulas. *Ann. Inst. Statist. Math.*, 59(3):487–498, 2007.
- [17] F. Durante, J.J. Quesada-Molina, and M. Úbeda-Flores. On a family of multivariate copulas for aggregation processes. *Inform. Sci.*, 177(24):5715–5724, 2007.
- [18] F. Durante, R. Foschi, and F. Spizzichino. Threshold copulas and positive dependence. *Statist. Probab. Lett.*, 78(17):2902–2909, 2008.
- [19] F. Durante and P. Jaworski. Absolutely continuous copulas with given diagonal sections. *Comm. Statist. Theory Methods*, 37(18):2924–2942, 2008.
- [20] F. Durante, E.P. Klement, and J.J. Quesada-Molina. Bounds for trivariate copulas with given bivariate marginals. *J. Inequal. Appl.*, 2008:1–9, 2008. Article ID 161537.
- [21] F. Durante, A. Kolesárová, R. Mesiar, and C. Sempi. Semilinear copulas. *Fuzzy Sets and Systems*, 159(1):63–76, 2008.
- [22] F. Durante, R. Mesiar, and P.-L. Papini. The lattice-theoretic structure of the sets of triangular norms and semi-copulas. *Nonlinear Anal.*, 69(1):46–52, 2008.
- [23] F. Durante, S. Saminger-Platz, and P. Sarkoci. On representations of 2-increasing binary aggregation functions. *Inform. Sci.*, 178(23):4534–4541, 2008.
- [24] F. Durante and P. Sarkoci. A note on the convex combinations of triangular norms. *Fuzzy Sets and Systems*, 159(1):77–80, 2008.
- [25] F. Durante. Construction of non-exchangeable bivariate distribution functions. *Statist. Papers*, 50(2):383–391, 2009.
- [26] F. Durante and R. Ghiselli-Ricci. Supermigrative semi-copulas and triangular norms. *Inform. Sci.*, 179(15):2689–2694, 2009.
- [27] F. Durante, M. Hofert, and M. Scherer. Multivariate hierarchical copulas with shocks. *Methodol. Comput. Appl. Probab.*, in press, 2009. Doi:10.1007/s11009-009-9134-6.
- [28] F. Durante and P. Jaworski. Spatial contagion between financial markets: a copula-based approach. *Appl. Stoch. Models Bus. Ind.*, in press, 2009. Doi: 10.1002/asmb.799.
- [29] F. Durante, E.P. Klement, C. Sempi, and M. Úbeda-Flores. Measures of non-exchangeability for bivariate random vectors. *Statist. Papers*, in press, 2009. Doi:10.1007/s00362-008-0153-0.
- [30] F. Durante and P.-L. Papini. Componentwise concave copulas and their asymmetry. *Kybernetika (Prague)* 45(6):1003–1011, 2009.
- [31] F. Durante, J.A. Rodríguez-Lallena, and M. Úbeda-Flores. New constructions of diagonal patchwork copulas. *Inform. Sci.*, 179(19):3383–3391, 2009.
- [32] F. Durante, S. Saminger-Platz, and P. Sarkoci. Rectangular patchwork for bivariate copulas and tail dependence. *Comm. Statist. Theory Methods*, 38(15):2515–2527, 2009.
- [33] F. Durante, P. Sarkoci, and C. Sempi. Shuffles of copulas. *J. Math. Anal. Appl.*, 352(2):914–921, 2009.
- [34] F. Durante, R. Foschi, and P. Sarkoci. Distorted copulas: constructions and tail dependence. *Comm. Statist. Theory Methods*, in press, 2010.

- [35] F. Durante, R. Foschi, and F. Spizzichino. Aging functions and multivariate notions of NBU and IFR. *Probab. Engrg. Inform. Sci.*, 24(2): 263–278, 2010.
- [36] F. Durante and P. Jaworski. A new characterization of bivariate copulas. *Comm. Statist. Theory Methods*, in press, 2010.
- [37] F. Durante and P.-L. Papini. Non-exchangeability of negatively dependent random variables. *Metrika*, 71(2):139–149, 2010.
- [38] F. Durante and G. Salvadori. On the construction of multivariate extreme value models via copulas. *Environmetrics*, 21(2):143–161, 2010.
- [39] F. Durante and F. Spizzichino. Semi-copulas, capacities and families of level curves. *Fuzzy Sets and Systems*, 161(2):269–276, 2010.

Papers in Proceedings of Conferences with Peer Review

- [1] F. Durante. What is a semicopula? In G. Pasi and R. Mesiar, editors, *Proceedings of AGOP – Summer School on Aggregation Operators*, pages 51–56. Lugano, 2005.
- [2] F. Durante, R. Mesiar, and C. Sempi. Copulas with given diagonal section: some new results. In E. Montseny and P. Sobrevilla, editors, *Proceedings of EUSFLAT-LFA Conference*, pages 932–936. Universitat Politècnica de Catalunya, Barcelona, 2005.
- [3] E. Alvoni, F. Durante, P.-L. Papini, and C. Sempi. Different types of convexity and concavity for copulas. In M. Štěpnička, V. Novák, and U. Bodenhofer, editors, *New Dimensions in Fuzzy Logic and related Technologies – Proceedings of the 5th EUSFLAT Conference*, volume 1, pages 185–189. University of Ostrava, 2007.
- [4] F. Durante. Constructions of non-symmetric copulas. In B. De Baets, K.C. Maes, and R. Mesiar, editors, *Proceedings of the Fourth International Summer School on Aggregation Operators*, pages 123–126. Academia Press, 2007.
- [5] F. Durante, R. Mesiar, and P.-L. Papini. On the relationships between triangular norms and semi-copulas. In B. De Baets, K.C. Maes, and R. Mesiar, editors, *Proceedings of the Fourth International Summer School on Aggregation Operators*, pages 151–154. Academia Press, 2007.
- [6] F. Durante, J.J. Quesada-Molina, and M. Úbeda-Flores. A method for constructing multivariate copulas. In M. Štěpnička, V. Novák, and U. Bodenhofer, editors, *New Dimensions in Fuzzy Logic and related Technologies – Proceedings of the 5th EUSFLAT Conference*, volume 1, pages 191–195. University of Ostrava, 2007.
- [7] F. Durante and F. Spizzichino. Bivariate ageing, semi-copulas and capacities. In *Proceedings of the International Workshop on Applied Probability*. Université de Technologie de Compiègne (France), 2008. (6 pages in total).

Contributions to Edited Volumes

- [1] F. Durante and C. Sempi. Compositions of copulas and quasi-copulas. In M. López-Díaz, M.Á. Gil, P. Grzegorzewski, O. Hryniewicz, and J. Lawry, editors, *Soft methodology and random information systems*, Adv. Soft Comput., pages 189–196. Springer, Berlin, 2004.
- [2] F. Durante. Dependence. In G. Salvadori, C. De Michele, N.T. Kottegoda, and R. Rosso, editors, *Extremes in Nature. An approach using copulas*, pages 219–232. Springer, Dordrecht (NL), 2007.

- [3] F. Durante. Families of copulas. In G. Salvadori, C. De Michele, N.T. Kottegoda, and R. Rosso, editors, *Extremes in Nature. An approach using copulas*, pages 233–269. Springer, Dordrecht (NL), 2007.
- [4] F. Durante, S. Saminger-Platz, and P. Sarkoci. On patchwork techniques for 2-increasing aggregation functions and copulas. In D. Dubois, M.A. Lubiano, H. Prade, M.Á. Gil, P. Grzegorzewski, and O. Hryniewicz, editors, *Soft methods for handling variability and imprecision*, Adv. Soft Comput., pages 349–356. Springer, Berlin, 2008.
- [5] F. Durante and C. Sempi. Copula theory: an introduction. In F. Durante, W. Härdle, P. Jaworski, and T. Rychlik, editors, *Workshop on Copula Theory and its Applications*, Lecture Notes in Statistics - Proceedings. Springer, Berlin/Heidelberg, in press, 2010.

Other Publications

- [1] F. Durante. Caratterizzazione di quasi-copule multidimensionali. Master’s Thesis in Mathematics, Università degli Studi di Lecce (Italy), 2001. In Italian. (50 pages in total).
- [2] F. Durante and C. Sempi. Copulae and Schur-concavity. *Int. Math. J.*, 3(9):893–905, 2003.
- [3] F. Durante. *New results on copulas and related concepts*. PhD Thesis in Mathematics, Dipartimento di Matematica “E. De Giorgi”, Università degli Studi di Lecce (Italy), 2006. (176 pages in total).
- [4] F. Durante. Nuovi risultati su copule e concetti collegati. *Boll. Unione Mat. Ital. (A)*, 10(2):231–234, 2007. In Italian. (Summary of the PhD thesis by the author).
- [5] F. Durante, R. Mesiar, and C. Sempi. Editorial “Random variables, joint distribution functions, and copulas”. *Kybernetika (Prague)*, 44(6):741–744, 2008.
- [6] 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.