

LIST OF PUBLICATIONS- ANA COLUBI

- [1] A. Colubi, J. SANTOS DOMINGUEZ-MENCHERO, and M. LOPEZ-DIAZ, "On the dp-strong law of large numbers for fuzzy random variables," in *IPMU'98*, pp. 998–1001, 1998.
- [2] A. Colubi, M. López-Díaz, J. S. Domínguez-Menchero, and M. A. Gil, "A generalized strong law of large numbers," *Probability Theory and Related Fields*, vol. 114, no. 3, pp. 401–417, 1999.
- [3] A. Colubi, J. S. Domínguez-Menchero, M. López-Díaz, and D. A. Ralescu, "On the formalization of fuzzy random variables," *Information Sciences*, vol. 133, no. 1-2, pp. 3–6, 2001.
- [4] A. Colubi, J. S. Domínguez-Menchero, M. López-Díaz, and R. Körner, "A method to derive strong laws of large numbers for random upper semicontinuous functions," *Statistics & probability letters*, vol. 53, no. 3, pp. 269–275, 2001.
- [5] M. Montenegro, M. R. Casals, A. Colubi, and M. A. Gil, "Testing the expected value of a fuzzy random variable. a discussion.," in *EUSFLAT Conf.*, pp. 352–355, 2001.
- [6] A. Colubi, J. Domínguez-Menchero, M. López-Díaz, and D. Ralescu, "A d- $\{E\}[0, 1]$ representation of random upper semicontinuous functions," *Proceedings of the American Mathematical Society*, vol. 130, no. 11, pp. 3237–3242, 2002.
- [7] A. Colubi, C. Fernández-García, and M. Á. Gil, "Simulation of random fuzzy variables: an empirical approach to statistical/probabilistic studies with fuzzy experimental data," *IEEE Transactions on Fuzzy Systems*, vol. 10, no. 3, pp. 384–390, 2002.
- [8] A. Colubi, "Traditional techniques to prove some limit theorems for fuzzy random variables," in *Statistical Modeling, Analysis and Management of Fuzzy Data*, pp. 64–71, Physica, Heidelberg, 2002.
- [9] M. Montenegro, A. Colubi, M. Casals, and M. Gil-Álvarez, "Test of one-sided hypotheses on the expected value of a fuzzy random variable," in *Soft Methods in Probability, Statistics and Data Analysis*, pp. 228–235, Physica, Heidelberg, 2002.
- [10] M. Montenegro, A. Colubi, M. R. Casals, and M. Á. Gil, "Asymptotic and bootstrap techniques for testing the expected value of a fuzzy random variable," *Metrika*, vol. 59, no. 1, pp. 31–49, 2004.
- [11] M. Montenegro, G. González-Rodríguez, M. A. Gil, A. Colubi, and M. R. Casals, "Introduction to anova with fuzzy random variables," in *Soft methodology and random information systems*, pp. 487–494, Springer, Berlin, Heidelberg, 2004.
- [12] M. Montenegro, G. González-Rodríguez, A. Colubi, and M. A. Gil, "Bootstrap approach to test the linear independence between interval-valued random sets," in *Soft Methodology and Random Information Systems*, pp. 431–438, Springer, Berlin, Heidelberg, 2004.
- [13] M. Montenegro, G. González-Rodríguez, A. Colubi, and M. A. Gil, "Bootstrap techniques: A valuable tool in statistical hypothesis testing about the means of fuzzy random variables.," in *EUSFLAT Conf.*, pp. 599–604, 2005.
- [14] G. González-Rodríguez, M. Montenegro, A. Colubi, and M. Á. Gil, "Bootstrap techniques and fuzzy random variables: Synergy in hypothesis testing with fuzzy data," *Fuzzy Sets and Systems*, vol. 157, no. 19, pp. 2608–2613, 2006.
- [15] M. Á. Gil, M. Montenegro, G. González-Rodríguez, A. Colubi, and M. R. Casals, "Bootstrap approach to the multi-sample test of means with imprecise data," *Computational Statistics & Data Analysis*, vol. 51, no. 1, pp. 148–162, 2006.
- [16] G. González-Rodríguez, A. Colubi, and M. Á. Gil, "A fuzzy representation of random variables: an operational tool in exploratory analysis and hypothesis testing," *Computational Statistics & Data Analysis*, vol. 51, no. 1, pp. 163–176, 2006.
- [17] G. González-Rodríguez, A. Colubi, M. Gil, and P. D'Urso, "An asymptotic two dependent samples test of equality of means of fuzzy random variables," in *Proc. COMPSTAT*, vol. 2006, 2006.
- [18] G. González-Rodríguez, A. Colubi, R. Coppi, and P. Giordani, "On the estimation of linear models with interval-valued data," *Proc. 17th IASC*, 2006.
- [19] J. L. Flórez, A. Colubi, G. González-Rodríguez, and M. A. Gil, "Nonparametric regression with fuzzy random variables through the support functions," *Proc. IPMU 2006*, pp. 724–730, 2006.

- [20] G. González-Rodríguez, A. Colubi, P. D'Urso, and P. Giordani, "An asymptotic test for symmetry of random variables based on fuzzy tools," in *Soft Methods for Integrated Uncertainty Modelling*, pp. 87–94, Springer, Berlin, Heidelberg, 2006.
- [21] A. Colubi, G. González-Rodríguez, M. A. Lubiano, and M. Montenegro, "Exploratory analysis of random variables based on fuzzifications," in *Soft methods for integrated uncertainty modelling*, pp. 95–102, Springer, Berlin, Heidelberg, 2006.
- [22] M. A. Lubiano, A. Colubi, G. González-Rodríguez, and R. Coppi, "Estimation of the distribution of a random variable based on a fuzzy representation," in *Proceedings of the 11th IPMU international Conference (Information Processing and Management of Uncertainty in Knowledge-based Systems)*, pp. 718–723, 2006.
- [23] D.-M. S. Colubi, Ana and G. Gonzalez-Rodrigues, "Testing constancy for isotonic regressions," *Scandinavian journal of statistics*, vol. 33, no. 3, pp. 463–475, 2006.
- [24] G. González-Rodríguez, A. Colubi, M. A. Gil, and R. Coppi, "A method to simulate fuzzy random variables," in *Soft Methods for Integrated Uncertainty Modelling*, pp. 103–110, Springer, Berlin, Heidelberg, 2006.
- [25] M. Á. Gil, G. González-Rodríguez, A. Colubi, and M. Montenegro, "Testing linear independence in linear models with interval-valued data," *Computational Statistics & Data Analysis*, vol. 51, no. 6, pp. 3002–3015, 2007.
- [26] A. Colubi and G. González-Rodríguez, "Triangular fuzzification of random variables and power of distribution tests: empirical discussion," *Computational statistics & data analysis*, vol. 51, no. 9, pp. 4742–4750, 2007.
- [27] G. González-Rodríguez, Á. Blanco, N. Corral, and A. Colubi, "Least squares estimation of linear regression models for convex compact random sets," *Advances in Data Analysis and Classification*, vol. 1, no. 1, pp. 67–81, 2007.
- [28] A. Colubi, N. Corral, G. Gonzalez-Rodriguez, and M. Montenegro, "A determination coefficient for fuzzy random variables in a fuzzy arithmetic-based linear model," in *Fuzzy Systems Conference, 2007. FUZZ-IEEE 2007. IEEE International*, pp. 1–4, IEEE, 2007.
- [29] A. Colubi, M. A. Gil, G. González-Rodríguez, and M. A. Lubiano, "An asymmetry coefficient for random variables based on fuzzification.," in *FUZZ-IEEE*, pp. 1–5, 2007.
- [30] A. Colubi, J. S. Domínguez-Menchero, and G. González-Rodríguez, "A test for constancy of isotonic regressions using the l_2 -norm," *Statistica Sinica*, pp. 713–724, 2007.
- [31] R. Coppi, A. Colubi, D. Pierpaolo, and M. A. Gil, "Statistics with fuzzy random variables," *Metron*, vol. 65, no. 3, pp. 277–303, 2007.
- [32] A. Colubi, G. González-Rodriguez, and M. Gil, "A new characterization of discrete random variables by means of fuzzy sets: Graphical features," *56th Session of the International Statistical Institute (ISI 2007, Lisbon, Portugal)*, p. 165, 2007.
- [33] A. Colubi, G. González-Rodríguez, M. Lubiano, and M. Montenegro, "Ancova for interval data: A bootstrap approach," *Proceedings of ISI-2007*, 2007.
- [34] A. Blanco, A. Colubi, N. Corral, and G. González-Rodríguez, "On a linear independence test for interval-valued random sets," in *Soft Methods for Handling Variability and Imprecision*, pp. 111–117, Springer, Berlin, Heidelberg, 2008.
- [35] A. Colubi, G. González-Rodríguez, M. J. Domínguez-Cuesta, and M. Jiménez-Sánchez, "Favorability functions based on kernel density estimation for logistic models: A case study," *Computational Statistics & Data Analysis*, vol. 52, no. 9, pp. 4533–4543, 2008.
- [36] M. Montenegro, M. R. Casals, A. Colubi, and M. Á. Gil, "Testing two-sided hypothesis about the mean of an interval-valued random set," in *Soft Methods for Handling Variability and Imprecision*, pp. 133–139, Springer, Berlin, Heidelberg, 2008.
- [37] A. Colubi, M. Á. Gil, G. González-Rodríguez, and M. T. López, "Empirical comparisons of goodness-of-fit tests for binomial distributions based on fuzzy representations," in *Soft Methods for Handling Variability and Imprecision*, pp. 190–197, Springer, Berlin, Heidelberg, 2008.
- [38] A. B. Ramos, G. González-Rodríguez, A. Colubi, and M. Á. Gil, "Asymptotic tests for the variance of a fuzzy random variable using the dk-metric," in *Soft Methods for Handling Variability and Imprecision*, pp. 140–146, Springer, Berlin, Heidelberg, 2008.
- [39] M. A. Lubiano, A. Colubi, and G. González-Rodríguez, "Empirical results concerning a fuzzy-based measure of symmetry of real random variables," in *Soft Methods for Handling Variability and Imprecision*, pp. 147–154, Springer, Berlin, Heidelberg, 2008.

- [40] A. Colubi, "Statistical inference about the means of fuzzy random variables: Applications to the analysis of fuzzy-and real-valued data," *Fuzzy sets and systems*, vol. 160, no. 3, pp. 344–356, 2009.
- [41] W. Trutschnig, G. González-Rodríguez, A. Colubi, and M. Á. Gil, "A new family of metrics for compact, convex (fuzzy) sets based on a generalized concept of mid and spread," *Information Sciences*, vol. 179, no. 23, pp. 3964–3972, 2009.
- [42] G. González-Rodríguez, Á. Blanco, A. Colubi, and M. A. Lubiano, "Estimation of a simple linear regression model for fuzzy random variables," *Fuzzy Sets and Systems*, vol. 160, no. 3, pp. 357–370, 2009.
- [43] G. González-Rodríguez, A. Colubi, and W. Trutschnig, "Simulation of fuzzy random variables," *Information Sciences*, vol. 179, no. 5, pp. 642–653, 2009.
- [44] P. García, E. Zapico, and A. Colubi, "An angiosperm quality index (aqi) for cantabrian estuaries," *Ecological Indicators*, vol. 9, no. 5, pp. 856–865, 2009.
- [45] G. González Rodríguez, A. M. Colubi, P. D'Urso, and M. F. Montenegro Hermida, "Multi-sample test-based clustering for fuzzy random variables," *International Journal of Approximate Reasoning*, 2009.
- [46] G. González-Rodríguez, W. Trutschnig, and A. Colubi, "Confidence regions for the mean of a fuzzy random variable," *IFSA-EUSFLAT*, 2009.
- [47] A. Colubi, M. A. Gil, G. González-Rodríguez, and W. Trutschnig, "Discriminant analysis for fuzzy random variables based on nonparametric regression.," in *IFSA/EUSFLAT Conf.*, pp. 1428–1432, 2009.
- [48] M. B. Ferraro, R. Coppi, G. González Rodríguez, and A. M. Colubi, "A linear regression model for imprecise response," *International Journal of Approximate Reasoning*, 2010.
- [49] A. B. Ramos-Guajardo, A. Colubi, G. González-Rodríguez, and M. Á. Gil, "One-sample tests for a generalized fréchet variance of a fuzzy random variable," *Metrika*, vol. 71, no. 2, pp. 185–202, 2010.
- [50] M. J. Domínguez-Cuesta, M. Jiménez-Sánchez, A. Colubi, and G. González-Rodríguez, "Modelling shallow landslide susceptibility: a new approach in logistic regression by using favourability assessment," *International journal of earth sciences*, vol. 99, no. 3, pp. 661–674, 2010.
- [51] P. García, C. Santín, A. Colubi, and L. M. Gutiérrez, "Nutrient and oxygenation conditions in transitional and coastal waters: proposing metrics for status assessment," *Ecological Indicators*, vol. 10, no. 6, pp. 1184–1192, 2010.
- [52] B. Jiménez-Alfaro, A. Colubi, and G. González-Rodríguez, "A comparison of point-scoring procedures for species prioritization and allocation of seed collection resources in a mountain region," *Biodiversity and conservation*, vol. 19, no. 13, pp. 3667–3684, 2010.
- [53] B. Sinova, M. R. Casals, A. Colubi, and M. Á. Gil, "The median of a random interval," in *Combining Soft Computing and Statistical Methods in Data Analysis*, pp. 575–583, Springer, Berlin, Heidelberg, 2010.
- [54] M. B. Ferraro, A. Colubi, and P. Giordani, "A linearity test for a simple regression model with lr fuzzy response," in *Combining Soft Computing and Statistical Methods in Data Analysis*, pp. 263–271, Springer, Berlin, Heidelberg, 2010.
- [55] T. Nakama, A. Colubi, and M. A. Lubiano, "Two-way analysis of variance for interval-valued data," in *Combining Soft Computing and Statistical Methods in Data Analysis*, pp. 475–482, Springer, Berlin, Heidelberg, 2010.
- [56] E. Fernández, M. Fernández, S. Anadón, G. González-Rodríguez, and A. Colubi, "Flood analysis: on the automation of the geomorphological-historical method," in *Combining Soft Computing and Statistical Methods in Data Analysis*, pp. 239–246, Springer, Berlin, Heidelberg, 2010.
- [57] L. García-de la Fuente, A. Colina, A. Colubi, and G. González-Rodríguez, "Valuation of environmental resources: The case of the brown bear in the north of spain," *Environmental Modeling & Assessment*, vol. 15, no. 2, pp. 81–91, 2010.
- [58] A. Colubi, M. Lubiano, and G. González-Rodríguez, "Teaching statistics for computer sciences with r: The importance of the visualizing the variability," in *EDULEARN10 Proceedings*, pp. 4898–4904, IATED, 2010.
- [59] J. Fan, J.-T. Zhang, and W. Zhang, "Comments on: Dynamic relations for sparsely sampled gaussian processes," *Test*, vol. 19, no. 1, pp. 37–42, 2010.

- [60] M. B. Ferraro, A. Colubi, G. González-Rodríguez, and R. Coppi, “A determination coefficient for a linear regression model with imprecise response,” *Environmetrics*, vol. 22, no. 4, pp. 516–529, 2011.
- [61] A. Colubi, G. González-Rodríguez, M. Á. Gil, and W. Trutschnig, “Nonparametric criteria for supervised classification of fuzzy data,” *International Journal of Approximate Reasoning*, vol. 52, no. 9, pp. 1272–1282, 2011.
- [62] Á. Blanco Fernández, A. B. Ramos Guajardo, A. M. Colubi, and G. González Rodríguez, “Teaching statistical hypothesis testing: a simulation-based methodology,” in *EDULEARN11: 3rd International Conference on Education and New Learning Technologies*, IATED-INT Assoc. Technology Education & Development, 2011.
- [63] A. B. Ramos Guajardo, Á. Blanco Fernández, A. M. Colubi, and G. González Rodríguez, “A new proposal for student learning evaluation: an application to learning style surveys,” in *EDULEARN11: 3rd International Conference on Education and New Learning Technologies*, IATED-INT Assoc. Technology Education & Develop, 2011.
- [64] G. González-Rodríguez, A. Colubi, and M. Á. Gil, “Fuzzy data treated as functional data: A one-way anova test approach,” *Computational Statistics & Data Analysis*, vol. 56, no. 4, pp. 943–955, 2012.
- [65] B. Sinova, M. Á. Gil, A. Colubi, and S. Van Aelst, “The median of a random fuzzy number. the 1-norm distance approach,” *Fuzzy Sets and Systems*, vol. 200, pp. 99–115, 2012.
- [66] A. Blanco-Fernández, A. Colubi, and G. González-Rodríguez, “Confidence sets in a linear regression model for interval data,” *Journal of Statistical Planning and Inference*, vol. 142, no. 6, pp. 1320–1329, 2012.
- [67] E. Fernández, A. Colubi, G. González-Rodríguez, and S. Anadón, “Integrating statistical information concerning historical floods: ranking and interval return period estimation,” *Natural hazards*, vol. 62, no. 2, pp. 459–483, 2012.
- [68] B. Sinova, A. Colubi, G. González-Rodríguez, *et al.*, “Interval arithmetic-based simple linear regression between interval data: Discussion and sensitivity analysis on the choice of the metric,” *Information Sciences*, vol. 199, pp. 109–124, 2012.
- [69] R. Menéndez-Duarte, D. V. Tarrío, S. Fernández, and A. Colubi, “Favorability values of geological, vegetation and relief factors for the development of soil creep landforms,” *Zeitschrift für Geomorphologie*, vol. 56, no. 1, pp. 75–92, 2012.
- [70] A. Colubi and D. Dubois, “Special issue on fuzzy sets in statistics,” *Computational Statistics & Data Analysis*, vol. 56, no. 4, pp. 892–893, 2012.
- [71] G. González-Rodríguez, A. Colubi, M. Á. Gil, and M. A. Lubiano, “A new way of quantifying the symmetry of a random variable: estimation and hypothesis testing,” *Journal of Statistical Planning and Inference*, vol. 142, no. 12, pp. 3061–3072, 2012.
- [72] A. Blanco-Fernández, A. Colubi, M. García-Bárzana, and M. Montenegro, “A linear regression model for interval-valued response based on set arithmetic,” in *Synergies of Soft Computing and Statistics for Intelligent Data Analysis*, pp. 105–113, Springer, Berlin, Heidelberg, 2013.
- [73] M. García-Bárzana, A. Colubi, and E. J. Kontoghiorghe, “On the estimation of the regression model m for interval data,” in *Towards Advanced Data Analysis by Combining Soft Computing and Statistics*, pp. 43–52, Springer, Berlin, Heidelberg, 2013.
- [74] A. Blanco-Fernández, M. R. Casals, A. Colubi, R. Coppi, N. Corral, S. d. I. R. de Saa, P. D’Urso, M. B. Ferraro, M. García-Bárzana, M. Á. Gil, *et al.*, “Arithmetic and distance-based approach to the statistical analysis of imprecisely valued data,” in *Towards Advanced Data Analysis by Combining Soft Computing and Statistics*, pp. 1–18, Springer, Berlin, Heidelberg, 2013.
- [75] M. Casals, A. Colubi, N. Corral, M. Gil, M. Montenegro, M. Lubiano, A. Ramos-Guajardo, B. Sinova, *et al.*, “Random fuzzy sets: a mathematical tool to develop statistical fuzzy data analysis,” *Iranian Journal of Fuzzy Systems*, vol. 10, no. 2, pp. 1–28, 2013.
- [76] A. Blanco-Fernández, A. Colubi, and M. García-Bárzana, “A set arithmetic-based linear regression model for modelling interval-valued responses through real-valued variables,” *Information Sciences*, vol. 247, pp. 109–122, 2013.
- [77] A. Blanco-Fernández, A. B. Ramos-Guajardo, and A. Colubi, “Fuzzy representations of real-valued random variables: applications to exploratory and inferential studies,” *Metron*, vol. 71, no. 3, pp. 245–259, 2013.

- [78] M. Montenegro, G. González-Rodríguez, A. Colubi, and M. A. Gil, “Bootstrap approach to test,” *Soft Methodology and Random Information Systems*, vol. 26, p. 431, 2013.
- [79] A. Blanco-Fernández, A. Colubi, and G. González-Rodríguez, “Linear regression analysis for interval-valued data based on set arithmetic: A review,” in *Towards Advanced Data Analysis by Combining Soft Computing and Statistics*, pp. 19–31, Springer, Berlin, Heidelberg, 2013.
- [80] A. B. Ramos-Guajardo, A. Colubi, and G. González-Rodríguez, “Inclusion and exclusion hypothesis tests for the fuzzy mean,” *Fuzzy Sets and Systems*, vol. 243, pp. 70–83, 2014.
- [81] A. Colubi, J. S. Domínguez-Menchero, and G. González-Rodríguez, “Testing constancy in monotone response models,” *Computational Statistics & Data Analysis*, vol. 72, pp. 45–56, 2014.
- [82] M. A. Gil, A. Colubi, and P. Terán, “Random fuzzy sets: why, when, how,” *BEIO*, vol. 30, no. 1, pp. 5–29, 2014.
- [83] E. J. Kontoghiorghes, H. K. Van Dijk, D. A. Belsley, T. Bollerslev, F. X. Diebold, J.-M. Dufour, R. Engle, A. Harvey, S. J. Koopman, H. Pesaran, *et al.*, “Cfenetwork: The annals of computational and financial econometrics,” *Computational statistics & data analysis*, vol. 76, pp. 1–3, 2014.
- [84] A. B. Ramos-Guajardo, A. Colubi, and G. González-Rodríguez, “Inclusion degree tests for the aumann expectation of a random interval,” *Information Sciences*, vol. 288, pp. 412–422, 2014.
- [85] A. Blanco-Fernández, M. R. Casals, A. Colubi, N. Corral, M. García-Bárzana, M. Gil, G. González-Rodríguez, M. T. López, M. A. Lubiano, M. Montenegro, *et al.*, “Rejoinder on a distance-based statistical analysis of fuzzy number-valued data,” *International Journal of Approximate Reasoning*, vol. 55, no. 7, pp. 1601–1605, 2014.
- [86] A. Blanco-Fernández, M. R. Casals, A. Colubi, N. Corral, M. García-Bárzana, M. Gil, G. González-Rodríguez, M. T. López, M. A. Lubiano, M. Montenegro, *et al.*, “A distance-based statistical analysis of fuzzy number-valued data,” *International Journal of Approximate Reasoning*, vol. 55, no. 7, pp. 1487–1501, 2014.
- [87] M. G. Bárzana, A. Colubi, and E. J. Kontoghiorghes, “Lasso estimation of an interval-valued multiple regression model,” in *Strengthening Links Between Data Analysis and Soft Computing*, pp. 185–191, Springer, Cham, 2015.
- [88] A. Colubi and T. Denoeux, “Special issue on imprecision in statistical data analysis,” *Computational Statistics & Data Analysis*, vol. 71, no. C, pp. 787–788, 2014.
- [89] A. Blanco-Fernández, M. García Bárzana, A. Colubi, and E. J. Kontoghiorghes, “Multiple set arithmetic-based linear regression models for interval-valued variables,” tech. rep., Working Paper. Department of Statistics and OR and Mathematics Didactics, University of Oviedo, 2015.
- [90] A. Colubi and G. González-Rodríguez, “Fuzziness in data analysis: Towards accuracy and robustness,” *Fuzzy Sets and Systems*, vol. 281, pp. 260–271, 2015.
- [91] P. G. Manteca, C. N. Quesada, N. Cuervo, A. C. , and L. G. Flórez, “Estimación del área húmeda, actual y potencial, disponible para la anguila europea (anguilla anguilla) usando técnicas gis,” *Geofocus: Revista Internacional de Ciencia y Tecnología de la Información Geográfica*, no. 16, p. 8, 2015.
- [92] A. Colubi, C. Gatu, and E. John Kontoghiorghes, “Special issue on computational statistics,” *International Journal of Computer Mathematics*, vol. 93, no. 4, pp. 627–627, 2016.
- [93] M. I. Cosbuc, C. Gatu, A. Colubi, and E. J. Kontoghiorghes, “A generalized singular value decomposition strategy for estimating the block recursive simultaneous equations model,” *Computational Economics*, vol. 50, no. 3, pp. 503–515, 2017.
- [94] A. Colubi and G. Gonzalez-Rodriguez, “On some functional characterizations of (fuzzy) set-valued random elements,” in *Soft Methods for Data Science*, pp. 135–140, Springer, Cham, 2017.
- [95] G. González-Rodríguez and A. Colubi, “On the consistency of bootstrap methods in separable hilbert spaces,” *Econometrics and Statistics*, vol. 1, pp. 118–127, 2017.
- [96] E. Kontoghiorghes, H. K. Van Dijk, and A. M. Colubi, “Econometrics and statistics,” *Econometrics and statistics*, 2017.
- [97] G. Gonzalez-Rodriguez, A. B. Ramos-Guajardo, A. Colubi, and Á. Blanco-Fernández, “A new framework for the statistical analysis of set-valued random elements,” *International Journal of Approximate Reasoning*, vol. 92, pp. 279–294, 2018.

- [98] A. Colubi, J. S. Domínguez-Menchero, and G. Gonzalez-Rodríguez, “New designs to consistently estimate the isotonic regression,” *Computational Statistics*, vol. 33, no. 2, pp. 639–658, 2018.
- [99] A. Colubi, J. S. Domínguez-Menchero, and G. González-Rodríguez, “The spiking problem in the context of the isotonic regression,” in *The Mathematics of the Uncertain*, pp. 101–108, Springer, Cham, 2018.
- [100] A. B. Ramos-Guajardo, G. González-Rodríguez, A. Colubi, M. B. Ferraro, and Á. Blanco-Fernández, “On some concepts related to star-shaped sets,” in *The Mathematics of the Uncertain*, pp. 699–708, Springer, Cham, 2018.

arg min