

PROF. EMANUELE BORGONOVO
SCIENTIFIC PUBLICATIONS

Papers in Internationally Refereed Journals and Volumes

- [1] Rabitti G. and Borgonovo E., 2020: "Is mortality or interest rate the most important risk in annuity models? A Comparison of Sensitivity Analysis Methods," *Mathematics, Insurance and Economics*, forthcoming.
- [2] Plischke E. and Borgonovo, E., 2020: "Fighting the Curse of Sparsity: Global Sensitivity Measures from Cumulative Distribution Functions", *Risk Analysis*, forthcoming.
- [3] Borgonovo, E., Hazen G.B., Jose V.R.R. and Plischke, E. (2020) 'Probabilistic Sensitivity Measures as Information Value', *European Journal of Operational Research*, forthcoming, pp. 1–15.
- [4] X. Lu, A. Rudi, E. Borgonovo and L. Rosasco, 2019: "Facing High Dimensional Simulators: Faster Kriging?", *Operations Research*, forthcoming.
- [5] I. Antoniano Villalobos, E. Borgonovo and X. Lu, 2019: "A Non-Parametric Approach to the Estimation of Global Sensitivity Measures", *Statistics and Computing*, forthcoming.
- [6] G. Rabitti and E. Borgonovo: "A Shapley-Owen Measure for Global Interactions," *SIAM-ASA Journal on Uncertainty Quantification*, forthcoming.
- [7] E. Plischke and E. Borgonovo, 2019: Copula Theory and Sensitivity Analysis: Is there a Connection?, *European Journal of Operational Research*, forthcoming.
- [8] Antoniano I., Borgonovo E. and Siriwardena S., 2018: "What Parameter is Important? Stochastic Differential Importance", *Risk Analysis*, to appear.
- [9] Borgonovo E., Morris M.D., Plischke E., 2018: Functional ANOVA with Multiple Distributions: Implications for the Sensitivity Analysis of Computer Experiments, *SIAM/ASA Journal on Uncertainty Quantification*, forthcoming.
- [10] Borgonovo E., Buzzard G. and Wendell R., 2017: A Global Tolerance Approach to Sensitivity Analysis in Linear Programming, *European Journal of Operational Research*, forthcoming.
- [11] Borgonovo E., Cillo A., 2017: On the relationship between Decision Significance and Safety Significance, *Risk Analysis*, forthcoming.
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- [13] Borgonovo, E., Cappelli, V., Maccheroni, F., Marinacci, M., 2018: Risk analysis and decision theory: A bridge, *European Journal of Operational Research*, 264 (1), pp. 280-293.
- [14] Marangoni, G., Tavoni, M., Bosetti, V., Borgonovo, E., et al, 2017: Sensitivity of projected long-term CO₂ emissions across the Shared Socioeconomic Pathways, *Nature Climate Change*, 7 (2), pp. 113-117.
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- [16] Borgonovo E., Cillo A., 2016: Deciding with Thresholds: Importance and Value of Information, *Risk Analysis*, 37(10), pp. 1828-1848.
- [17] Hill M.C., Foglia L., Christensen S., Rakovec, O. and Borgonovo E.: Model Validation: Testing Models Using Data and Sensitivity Analysis, 2016, in Cushman, J.H. and Tartakovsky, D.M., eds. Handbook of groundwater engineering, 3rd Edition, Taylor and Francis.
- [18] Borgonovo, E., Aliee, H., Glaß, M., Teich, J. A new time-independent reliability importance measure (2016), *European Journal of Operational Research*, 254 (2), pp. 427-442.
- [19] Borgonovo E., Hazen G.B. and Plischke E., 2016: A Common Rationale for Global Sensitivity Measures and Their Estimation, *Risk Analysis*, 36(10), pp. 1871-1895.

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- [21]Borgonovo E. and Plischke, E., 2016: Sensitivity Analysis: A Review of Recent Advances, *European Journal of Operational Research*, 248(3), pp. 869-887.
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- [23]Di Maio F., Nicola G., Borgonovo E. and Zio E.: Ensemble of Invariant Methods for the Sensitivity Analysis of a Passive Containment Cooling System of an AP1000 Nuclear Power Plant, *Reliability Engineering & System Safety*.
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- [79]Borgonovo E., Caselli S., Cillo A., Masciandaro D., Rabitti G., 2018: "Between Cash, Deposit and Bitcoin: Would We Like a Central Bank Digital Currency? Money Demand and Experimental Economics," work in progress.
- [80]Plischke E. and Borgonovo E.: "Probabilistic Sensitivity Measures from Cumulative Distributions functions: A Horse Race of Methods," revise and resubmit, *Risk Analysis*.
- [81]E. Borgonovo, G. Rabitti and E. Plischke: "Interactions in Computer Experiments: What is in the Model Black Box?", submitted.
- [82] G. Rabitti and E. Borgonovo: "Interactions in Statistical Modelling: No Free Lunch", submitted.
- [83]E. Borgonovo, E. Plischke, G. Rabitti: "A comprehensive framework for sensitivity analysis of neural networks", work in progress.
- [84] Borgonovo E., Li G., Barr J.D., Plischke E. and Rabitz H., 2018: "Generalized Functional ANOVA for Global Sensitivity Analysis of Computer Experiments with Multiple Distributions", submitted.
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- [93] Borgonovo E., Anderson B., Roson R. and Galeotti M., 2012: Global Sensitivity Analysis and the Economics of Climate Change, *International Congress on Environmental Modeling and Software*, Leipzig, Germany.
- [94] E. Borgonovo and L. Peccati: "Value of Information in the Appraisal of Industrial Investments," 17th Working Seminar on Production Economics, Innsbruck, February 19-22 2012.
- [95] Borgonovo E. and Baucells M., 2011: "Probabilistic Sensitivity of Uncertain Cash Flow Streams," INFORMS, Charlotte, November 19-22, 2011.
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