

Curriculum Vitae

Pr. Dr. Raymond BISDORFF

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Functions (present and past)

- Full Professor at the University of Luxembourg (2003 -)
- Head of Computer Science and Communication Doctorate School (2009 -)
- Chair of the Association of Professors of the University of Luxembourg - APUL (2011 -)
- Coordinator of the Applied Mathematics Unit (2005 - 2007)
- Vice-president of the Scientific Consulting Commission of the University of Luxembourg (2005 - 2009)
- President of the Belgian Operational Research Society, [ORBEL](#) a.k.a. Sogesci-B.V.W.B. (2008 - 2010)
- Head of the [Applied Mathematics Research Unit](#), FDEF, University of Luxembourg (2004 - 2007)
- Vice-president of the *International Federation of Operational Research Societies (IFORS)* representing [EURO](#), the Association of European Operational Research Societies (2005 - 2007)
- Dean of the Faculty of Law, Economics and Finance (2003-2004)
- Head of the Business and Computing Science Department, Luxembourg University Centre (2002-2003)
- Professor at the Luxembourg University Centre (1995-2003)
- Vice-president of the Association of European Operational Research Societies [EURO](#) (1997-2000)
- Head of Research Unit *Statistics and Decision* (STADE), Public Research Centre - Gabriel-Lippmann a.k.a. Centre Universitaire (1993-2000)

Honors and Awards

- Visiting Professor (2010-2011) at [TELECOM Bretagne](#), département [Lussi](#) - *Logique des usages, sciences sociales et de l'information*.
- Collaborateur scientifique (2010-2011) de la [Faculté Polytechnique](#) de l'Université de Mons.
- Visiting professor (academic years 2008-2009 and 2005-2006) at [LAMSADE](#), *Laboratoire d'Analyse et de Modélisation de Systèmes d'aide à la Décision*, [University Paris-Dauphine](#).
- Honour diploma (2005) from [HELORS](#), the *Hellenic Operational Research Society*, for chairing the international Programme Committee of the XXth EURO'2004 Conference, Island of Rhodes, July 4-7, 2004.
- Visiting professor (academic year 2005-2006 and 2008-2009) at [LAMSADE](#), *Laboratoire d'Analyse et de Modélisation de Systèmes d'aide à la Décision*, [University Paris-Dauphine](#).
- Honourable collaborator (1996 - 2005) of the [University of Liège](#) (Belgium) on behalf of the

Institute of Mathematics of the [Faculty of Sciences](#).

- NATO Graduate Degree Apprenticeship in Systems Science Grant (1975-1978)

Education

- Business Administration (LBA), Université de Liège 1975
- Methods and Models of Scientific Management (D.E.A./MScBA), Université Paris-Dauphine 1976
- Operations Research (Ph.D. 3rd c.), Université Paris-Dauphine 1981
- Management Sciences (Ph.D.), Université de Liège 2002

Teaching

- Master level:
 - Algorithmic Decision Theory
 - Computational Statistics
- Bachelor level:
 - Discrete Mathematics for Computer Scientists
 - Mathematical Methods for Decision Aid
 - Descriptive Statistics
 - Scientific simulation tools

Current research topics

- Multiple criteria decision aid (MCDA) methodology
- MCDA web services and XML encoding standard XMCD
- Bipolar-valued digraphs
- Random outranking digraphs

Actual and recent Ph. D. students

- Alexandru Olteanu (*co-direction with Pr. Patrick Meyer, Telecom Bretagne, FR*)
- Thomas Veneziano (*co-direction with Pr. Patrick Meyer, Telecom Bretagne, FR*)
- Patrick Meyer (*co-direction with Prof. Marc Pirlot, FPMs, BE*)
- Claude Lamboray (*co-direction with Pr. Philippe Vincke, ULB, BE*)

Scientific Edition

- Guest editor for feature clusters in the European Journal of Operational Research EJOR

Recent publications

For recent publications see R. Bisdorff's home page at

<http://charles-sanders-perce.uni.lu/bisdorff/>

R. Bisdorff (2010). On a bipolar foundation of the outranking concept. In proceedings of the 25th Mini EURO Conference *Uncertainty and Robustness in Planning and Decision Making* URPD-2010, University of Coimbra (Portugal), ISBN 978-989-95055-3-7, pp. 1-6

Th. Veneziano, P. Meyer and R. Bisdorff (2010). *Analyse inverse robuste à partir d'information préférentielle partielle*. Actes de la conférence ROADEF-2010, ENAC-TOULOUSE-FRANCE, ISBN 2-7238-0414-3, pp. 75-88 (preprint downloadable PDF file 191.1 Kb).

R. Bisdorff, P. Meyer and Th. Veneziano (2009). Inverse analysis from a CONDORCET robustness denotation of valued outranking relations. In F. Rossi and A. Tsoukiás (Eds.), *Algorithmic Decision Theory*. Springer-Verlag Berlin Heidelberg, LNAI 5783, pp. 180-191.

R. Bisdorff and J.L. Marichal (2008). Counting non-isomorphic maximal independent sets of the n-cycle graph. *Journal of Integer Sequences*, Vol. 11 Article 08.5.7

- R. Bisdorff (2008). A new criteria correlation for multiple criteria decision analysis. In Proceedings of *The DIMACS-LAMSADE Workshop on Algorithmic Decision Theory, Paris, 28-31 October 2008*, Université Paris-Dauphine, Annales du Lamsade 9:47-57.
- P. Meyer, J.-L. Marichal and R. Bisdorff (2008). Disagregation of bipolar-valued outranking relations. In *Modelling, Computation and Optimization in Information Systems and Management Sciences*, H. A. Le Thi, P. Bouvry, and D. Pham (eds), Springer CCIS 14 204-213, ISBN 978-3-540-87476-8.
- R. Bisdorff (2008). On clustering the criteria in an outranking based decision aid approach. In *Modelling, Computation and Optimization in Information Systems and Management Sciences*, H. A. Le Thi, P. Bouvry, and D. Pham (eds), Springer CCIS 14 409-418, ISBN 978-3-540-87476-8.
- R. Bisdorff, P. Meyer and M. Roubens (2008). RUBIS: a bipolar-valued outranking method for the choice problem. *4OR, A Quarterly Journal of Operations Research*, Springer-Verlag, Volume 6 Number 2 pp. 143-165. (Online) Electronic version: [DOI: 10.1007/s10288-007-0045-5](https://doi.org/10.1007/s10288-007-0045-5).
- R. Bisdorff, P. Meyer and Y. Siskos (2008). OR and the management of electronic services. EURO'2004 EJOR Cluster, *European Journal of Operational Research*, vol. 187 (3) 1293-1519.
- R. Bisdorff, G. Lundberg and J.-L. Marichal (guest editors)(2007), Human Centred Processes: Toward a Naturalistic Decision Making Paradigm. Feature Cluster, *European Journal of Operational Research*, Volume 177, Issue 3, 16 March 2007, Pages 1313-1519.
- R. Bisdorff and G. Lundberg (2007), Human centred processes: *Toward a naturalistic decision making paradigm*. Editorial for the feature cluster cited above. *European Journal of Operational Research*, Volume 177, Issue 3, 16 March 2007, Pages 1313-1316. (Online) Electronic version: [DOI:10.1016/j.ejor.2005.04.004](https://doi.org/10.1016/j.ejor.2005.04.004)
- P. Meyer and R. Bisdorff (2007), Exploitation of a bipolar-valued outranking relation for the choice of k best alternatives. In Proceedings of FRANCORO V / ROADEF 2007: *Conférence scientifique conjointe en Recherche Opérationnelle et Aide à la Décision*, Grenoble, France, 20 - 23 February 2007, pp. 193 - 206.
- R. Bisdorff (2006). *On enumerating the kernels in a bipolar-valued digraph*. Annales du Lamsade 6, Octobre 2006, pp. 1 - 38. Université Paris-Dauphine. ISSN 1762-455X
- R. Bisdorff, M. Pirlot and M. Roubens (2006). Choices and kernels from bipolar valued digraphs. *European Journal of Operational Research*, 175 (2006) 155-170. (Online) Electronic version: [DOI:10.1016/j.ejor.2005.05.004](https://doi.org/10.1016/j.ejor.2005.05.004)
- R. Bisdorff (2004). Concordant Outranking with multiple criteria of ordinal significance. *4OR, Quarterly Journal of the Belgian, French and Italian Operations Research Societies*, Springer-Verlag, Issue: Volume 2, Number 4, December 2004, Pages: 293 - 308. [ISSN: 1619-4500 (Paper) 1614-2411 (Online)] Electronic version: [DOI: 10.1007/s10288-004-0053-7](https://doi.org/10.1007/s10288-004-0053-7)
- R. Bisdorff and M. Roubens (2004). Le temps de noyaux Dans J. Bair et V. Henry (ed.), *Regards croisés sur les méthodes quantitatives de gestion*. Les Éditions de l'Université de Liège, Liège, 2004, pp. 41-54
- R. Bisdorff and M. Roubens (2004), Choice procedures in pairwise comparison multiple-attribute decision making methods. In R. Berghammer, B. Möller, G. Struth (ed.), *Relational and Kleene-Algebraic Methods in Computer Science: 7th International Seminar on Relational Methods in Computer Science and 2nd International Workshop on Applications of Kleene Algebra*, Bad Malente, Germany, May 12-17, 2003. Lecture Notes in Computer Science, Springer-Verlag Heidelberg, Volume 3051/2004, ISBN: 3-540-22145-X, pp 1-7.
- R. Bisdorff (2004), On a natural fuzzification of Boolean logic, in Erich Peter Klement and Endre Pap (editors), Proceedings of the 25th *Linz Seminar on Fuzzy Set Theory, Mathematics of Fuzzy Systems*. Bildungszentrum St. Magdalena, Linz (Austria), February 2004. pp. 20-26
- R. Bisdorff (Editor) (2003), *Human Centred Processes: Distributed decision making and man-machine cooperation*, Proceedings of the 14th Mini-EURO Conference HCP'2003, May 2003, Centre Universitaire, Luxembourg, 309 p.

- R. Bisdorff (2002), Electre like clustering from a pairwise fuzzy proximity index, *European Journal of Operational Research* EJOR, Vol. 138/2, pp. 320-331
- R. Bisdorff (2002), Logical Foundation of Multicriteria Preference Aggregation. Essay in *Aiding Decisions with Multiple Criteria*, D. Bouyssou et al. (editors), Kluwer Academic Publishers, pp. 379-403
- J.P. Barthélemy, R. Bisdorff and Ph. Lenca (Guest editors) (2002), Human Centered Processes. Feature Issue, *European Journal of Operational Research* EJOR, Volume 136, Number 2, January 16, 2002, pp. 231-352
- J.P. Barthélemy, R. Bisdorff and G. Coppin (2002), Human Centered Processes and Decision Support Systems, *European Journal of Operational Research* EJOR, 136(2002) 231-252
- R. Bisdorff (2000a), Logical foundation of fuzzy preferential systems with application to the electre decision aid methods, *Computers and Operations Research*, 27 (2000) 673-687
- R. Bisdorff (2000b), Illustrative Benchmark Analyses, in H.-H. Bock and E. Diday (eds), *Analysis of Symbolic Data*, Springer Verlag Berlin-Heidelberg 2000, ISBN 3-540-66619-2, Chapter 13, 355-385
- R. Bisdorff and E. Diday (2000c), Symbolic Data Analysis and the SODAS Software in Official Statistics, in H.A.L. Kiers, J.-P. Rasson et al. (eds), *Data Analysis, Classification, and Related Methods*, Springer Verlag Berlin-Heidelberg 2000, ISBN 3-540-67521-3, 401-408
- R. Bisdorff (1999a), Bipolar ranking from pairwise fuzzy outrankings, *Belgian Journal of Operations Research, Statistics and Computer Science*, Vol. 37 (4) 97 379-387. (Postscript file (274.8 Kb) for downloading).
- R. Bisdorff (1999b), Cognitive support methods for multi-criteria expert decision making, *European Journal of Operational Research*, 119 (1999) 379-387