SHORT CURRICULUM VITAE

of Barbara Vantaggi

Current Address: Department of MEMOTEF - University La Sapienza di Roma, Via Castro Laurenziano 9, 00161 Roma (Italy)

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Academic position:
Current position: Full Professor of Mathematical Methods of Economics, Finance and Actuarial Sciences at the University La Sapienza, Roma (from 3/9/2019)

Past positions: Associate Professor of Probability and Mathematical Statistics at the University La Sapienza, Roma (from 30-12-2010 to 2/9/2019)
Researcher of Probability and Mathematical Statistics at the University La Sapienza, Roma (from 1-11-1999 to 29/12/2010)

Education:
P.h.D. Metodi Statistici e Matematici per la Ricerca Economica e Sociale XII ciclo, at the Department of Scienze Statistiche of University of Perugia
Degree: Mathematics (15/03/1996) at the University of Perugia (110/110 cum lode)

Editorial Activity:
Area Editor (Probability and Statistics) of the journal Fuzzy Sets and Systems (since May 2018).
Member of the Editorial Board of the journal International Journal of Approximate Reasoning (since 2016).
Co-Guest Editor dello special issue The Mathematics of Subjective Probability per la rivista Decisions in Economics and Finance (2019)
Co-Guest Editor del volume VSI: SMPS 2016 dell'International Journal of Approximate Reasoning
Co-Editor del libro "Soft Methods for Data Science", Advances in Intelligent Systems and Computing, Springer Verlag (2016)
Co-Guest editor of volume of March 2008 of the journal International Journal of Approximate Reasoning.

Awards ISBA (2004) travel award for young researchers to attend ISBA meetings Conference at Viña del Mar (Cile)
Inverse Problems Insights for the publication on Inverse Problems nel 2015
FFABR 2017 from Ministero dell'Istruzione dell'Università e della Ricerca (MIUR).

Coordinator of the following main projects (last 15 years)

- PRIN 2008: Dynamic decision models under partial and vague knowledge (Coordinator of the local unit of Roma La Sapienza, MIUR)

- Founds for organization of the international conference "Soft Methods in Probability and Statistics" (GNAMPA-INdAM 2016)

- Founds for a fellowship - Projects under 40 (Fac. Engineering ICI, Univ. Sapienza 2012)

- Found for Visiting Professor Prof. Erkki Somersalo (Case Western Reserve University), Univ. La Sapienza (2015)

- Numerical and probabilistic models for the management of information, (Found Ateneo 2015, Univ. La Sapienza)

- Models for decisions, inferential processes and their applications, (Found Ateneo 2017, Univ. La Sapienza)

- Found for Visiting Professor Prof. Erkki Somersalo (Case Western Reserve University), Univ. La Sapienza (2017)

- Handling uncertainty: identifiability and random fields, (Found Ateneo 2019, Univ. La Sapienza)

Member of Program Committee of International Conference:
Member of Program Committee of International Symposium on Imprecise Probabilities and Their Applications ISIPTA' 03 - Switzerland (2003); ISIPTA' 05 Carnegie Mellon University (Pittsburgh) - USA; ISIPTA' 07 Charles University (Praga); ISIPTA' 09 Charles University (Durham); ISIPTA' 11 Charles University (Innsbruck); ISIPTA' 15, Pescara; ISIPTA' 17 - Switzerland (2017)
Member of Program Committee of European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty ECSQARU 2009 (Verona); ECSQARU 2011 (Belfast); ECSQARU 2013 (Utrecht); ECSQARU 2015 (Compiegne); ECSQARU 2017 (Lugano)
Member of Program Committee of 14th International Conference on Principles of Knowledge Representation and Reasoning KR 2014, Vienna (2014)
Member of Program Committee of International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems IPMU 2014 (Catania, 2014)
Member of Program Committee of International Conference on Soft Methods in Probability and Statistics 2014 SMPS 2014 (Varsavia); Member of Program Committee of 16th World Congress of the International Fuzzy Systems Association (IFSA) and the 9th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT), Gijón, Asturias (Spain, 2015)
Member of Program Committee of 4th International Conference on Belief Functions, Prague (2016)
Member of Program Committee of 16th International Conference on Information Processing and Management of Uncertainty In Knowledge-based Systems IPMU 2016, Eindhoven (Netherland 2016)
Member of Program Committee of 11th International Conference on Scalable Uncertainty Management SUM 2017 (Granada, 2017)

Member of P.h.D. Program

- Modelli per l'Economia e la Finanza (Sapienza) (dal 1.11.2019)

- Scienze e Tecnologie per i Sistemi Complessi (Sapienza) (1.11.2016-30.10.2019)

- Matematica e Informatica per il trattamento dell'informazione e della conoscenza (Universita' di Perugia-Dip. Matematica e Informatica) (01.01.2004-30.10.2013)

Software:
Fast closure computation and representation by means of DAGs of conditional independencies (in collaboration with M. Baioletti, G. Busanello).
Coherence check and extensions of conditional probability assessments and lower-upper envelopes of conditional probabilities (in collaboration with M. Baioletti, A. Capotorti, L. Galli, S. Tognoloni, F. Rossi). IAS-algorithm: iterative inverse solver for MEG (in collaboration with D. Calvetti, E. Somersalo, A. Pascarella, F. Pitolli)

Publications (last 5 years):

1. G. Coletti, L. van der Gaag, D. Petturiti, B. Vantaggi (2020) A Dutch book coherence condition for conditional completely alternating Choquet expectations. Bollettino dell'Unione Matematica Italiana, 1-9 2020

2. P. Antonini, D. Petturiti, B. Vantaggi (2020) Dynamic Portfolio Selection Under Ambiguity in the ϵ-Contaminated Binomial Model. International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, pp. 210-223

3. G. Coletti, L. van der Gaag, D. Petturiti, B. Vantaggi (2020) Detecting correlation between extreme probability events. INTERNATIONAL JOURNAL OF GENERAL SYSTEMS 49 (1), pp.64-87.

4. D. Petturiti, B. Vantaggi (2020) Modeling agent's conditional preferences under objective ambiguity in Dempster-Shafer theory. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 119, p. 151–176.

5. D. Petturiti, B. Vantaggi (2019) Conditional submodular Choquet expected values and conditional coherent risk measures. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 113, p. 14–38.

6. G. Coletti, D. Petturiti, B. Vantaggi (2019) Dutch book rationality conditions for conditional preferences under ambiguity. ANNALS OF OPERATIONS RESEARCH 279, p.115–150.

7. G. Coletti, D. Petturiti, B. Vantaggi (2019) Models for pessimistic or optimistic decisions under different uncertain scenarios. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 105, p. 305—326.

8. D. Petturiti, B. Vantaggi (2018) Upper and lower conditional probabilities induced by a multivalued mapping. JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS 458(2), p. 1214-1235.

9. D. Calvetti, F. Pitolli, E. Somersalo, B. Vantaggi (2018) Bayes meets Krylov: statistically inspired pre-conditioners for CGLS. SIAM Review 60(2), p. 429-461.

10. M. Di Zio, B. Vantaggi (2017) Partial identification in statistical matching with misclassification. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 82, p. 227–241.

11. D. Petturiti, B. Vantaggi (2017) Envelopes of conditional probabilities extending a strategy and a prior probability. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 81, 160–182.

12. G. Coletti, D. Petturiti, B. Vantaggi (2016). A savage-like representation theorem for preferences on multi-acts. Advances in Intelligent Systems and Computing 456, 127–134.

13. G. Coletti, D. Petturiti, B. Vantaggi (2016). When upper conditional probabilities are conditional possibility measures. FUZZY SETS AND SYSTEMS 304, 45-64.

14. D. Petturiti, B. Vantaggi (2016). Envelopes of joint probabilities with given marginals under absolute continuity or equivalence constraints. Advances in Intelligent Systems and Computing 456, 399–406

15. G. Coletti, D. Petturiti, B. Vantaggi (2016). Conditional belief functions as lower envelopes of conditional probabilities in a finite setting. INFORMATION SCIENCES 339 p. 64–84.

16. G. Coletti, R. Scozzafava, B. Vantaggi (2015). Possibilistic and Probabilistic Logic under Coherence: Default Reasoning and System P. MATHEMATICA SLOVACA 65(4) p. 863–890.

17. G. Coletti, D. Petturiti, B. Vantaggi (2015). Rationality principles for preferences on belief functions. KYBERNETIKA 51 p. 486–507.

18. G. Coletti, D. Petturiti, B. Vantaggi (2015). Decisions under risk and partial knowledge modelling uncertainty and risk aversion. Proc.of ISIPTA 2015 p. 77–86.

19. D. Calvetti, A. Pascarella, F. Pitolli, B. Vantaggi (2015) A hierarchical Krylov-Bayes iterative inverse solver for MEG with physiological preconditioning. INVERSE PROBLEMS 31-125005

Roma, 20/01/2020

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