

Marco Dall’Aglione
Curriculum Vitae
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Personal Information

Marco Dall’Aglione, born October 21, 1965 in Rome
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Education

- **1995.** Doctoral degree in methodological statistics, University “La Sapienza” of Rome, Italy. Doctoral thesis “Moment problem and linear semi-infinite programming in Bayesian robustness”
- **1991.** Bachelor degree cum laude in statistics, University “La Sapienza” of Rome, Italy;

Employment history

- **November 2010–Today.** Associate professor, LUISS University “Guido Carli”, Department of Economics and Finance, Rome, Italy.
- **December 2003–October 2010.** Associate professor, University “d’Annunzio”, Faculty of Economics, Pescara, Italy.
- **December 1996–November 2003.** Assistant professor, University “d’Annunzio”, Faculty of economics, Pescara, Italy.

Fellowships and Achievements

- **April 2018:** Italian national habilitation as full professor in mathematical methods in economics and in the actuarial and financial sciences.

- **October 2017-October 2019.** Head of the "Analytical-Cognitive-Experimental" workgroup for the European Union grant "CREA – Conflict Resolution with Equitative Algorithms". Call: JUST-AG-2016-05. Project 766463. Duration: 24 months. The projects involves 11 units from 8 European countries: Belgium, Croatia, France, Greece, Italy, Lithuania, Luxemburg, Slovenia.
- **2015-2020.** Italian Country representative for the SING European meeting on game theory
- **2000.** Italian National Research Council (C.N.R.) grant. Title: "Fair division and its application to statistics". Georgia Institute of Technology. School of Mathematics, Atlanta (U.S.A.). Supervisor: Prof. Theodore P. Hill. September 1, 1999–February 28, 2000.
- **1996.** Italian National Research Council (C.N.R.) grant. Title: "Metrization of epi-convergence". Department of Statistics and Applied Probability, Univeristy of California – Santa Barbara (U.S.A.). Supervisor: Prof. S.T. Rachev. March 18, 1996–July 25, 1996.
- **1991-92.** Istituto Nazionale di Alta Matematica (I.N.D.A.M.) grant for the academic year 1991/92.

Publications

Refereed Journal Articles

1. *Fair division of goods in the shadow of market values* European Journal of Operations Research, Vol.307:2 (2023), 785–801. ISSN 0377-2217. [10.1016/j.ejor.2022.10.025]
2. *Minimal winning coalitions and orders of criticality* (with M.Aleandri, V.Fagnelli and S. Moretti) Annals of Operations Research, Vol.318 (2022), 787–803. ISSN 0254-5330. [10.1007/s10479-021-04199-6]
3. *Asserting Fairness through AI, Mathematics and Experimental Economics. The CREA Project Case Study* (with D.T.Di Cagno, V.Fagnelli and F.Marazzi) I-LEX, Vol.14, 2021, 1–30. ISSN 1825-1927.
4. *Indices of criticality in simple games* (with S.Moretti and V.Fagnelli) International Game Theory Review, Vol.21, 2019, 1–21. ISSN: 0219-1989.

5. *Characterization of the Bayesian Posterior Distribution in Terms of Self-information* (with T.P.Hill) International Journal of Statistics and Probability Vol.7 (1), 2017, 21-25. ISSN: 1927-7032.
6. *The Shapley value in the Knaster gain game* (with F.Briata, A.Dall'Aglio and V Fragnelli) Annals of Operations Research Vol.259 (1-2), 2017, 1–19. ISSN: 1572-9338.
7. *Finding the Pareto Optimal Equitable Allocation of Homogeneous Divisible Goods Among Three Players* (with C.Di Luca and L.Milone) Operations Research and Decisions Vol.27 (3),2017, 35–50. ISSN 2081-8858.
8. *Orders of Criticality in Voting Games* (with V.Fragnelli and S.Moretti) Operations Research and Decisions Vol.26 (2), 2016, 53–67. ISSN 2081-8858.
9. *On Finding Optimal Partitions of Measurable Space* (with J.Legut, M.Wilczyński) Mathematica Applicanda, Vol.43 (2), 2015, 157–172. ISSN 1730-2668.
10. *On bankruptcy game theoretic interval rules* (with Rodica Branzei and Stef H. Tijs) International Journal of Mathematics, Game Theory and Algebra Volume 23 (4), 2015, 9–20. ISSN 1060-9881.
11. *Bounds for α -optimal partitioning of a measurable space based on several efficient partitions* (with Camilla Di Luca). Journal of Mathematical Analysis and Applications, Vol. 425, 2015, 854–863. ISSN: 0022-247X.
12. *Finding maxmin allocations in cooperative and competitive fair division* (with Camilla Di Luca). Annals Of Operations Research, Vol. 223, 2014, 121–136. ISSN: 1572-9338.
13. *Dynamic Collusion and Collusion Games in Knaster's Procedure.* (with Federica Briata and Vito Fragnelli) Acta Universitatis Carolinae. Oeconomica, Czech Economic Review, Vol. 6, 2012, 199–208. ISSN: 1802-4696.
14. *Allocation rules incorporating interval uncertainty* (with Rodica Branzei), Badania Operacyjne I Decyzje, Vol.19, 2009, 19–28. ISSN: 1230-1868.

15. *Cooperation in dividing the cake* (with Rodica Branzei e Stef H. Tijs), Top, Vol. 17, 2009, 19–28. ISSN: 1134-5764.
16. *Disputed Lands* (with Fabio Maccheroni), Games and Economic Behavior, Vol. 66, 2009, 57–77. ISSN: 0899-8256.
17. *How to allocate hard candies fairly* (with Raffaele Mosca), Mathematical Social Sciences, Vol.54, 2007, 218–237. ISSN: 0165-4896.
18. *Fair Division without Additivity* (with Fabio Maccheroni), American Mathematical Monthly, Vol.112, 2005, 363–365. ISSN: 0002-9890.
19. *Maximin share and minimax envy in fair-division theory* (with Theodore P. Hill). Journal of Mathematical Analysis and Applications, Vol. 281 (1), 2003, 346–361. ISSN: 0022-247X.
20. *Zonoids, Linear Dependence, and Size-Biased Distributions on the Simplex* (with Marco Scarsini). Advances in Applied Probability, Vol. 35 (4), 2003, 871–884. ISSN 0001-8678.
21. *Sensory Rating And Ranking Table Olives Through Permutation Models* (with Giuseppe Di Biase, Vincenzo Marsilio and Mario De Angelis). Journal of Commodity Science, Vol. 41, 2002, 3–13. ISSN: 1593-2052.
22. *When Lorenz met Lyapunov* (with Marco Scarsini). Statistics & Probability Letters, Vol. 54, 2001, 101–105. ISSN: 0167-7152.
23. *The Dubins-Spanier optimization problem in fair division theory*. Journal of Computational and Applied Mathematics, Vol. 130, 2001, 17–40. ISSN: 0377-0427.
24. *Metrization of epi-convergence: An application to the strong consistency of M-estimators* (with Svetlozar T. Rachev), Journal of Computational Analysis and Applications, Vol.1, 1999, 63–86. ISSN: 1521-1398.
25. *Robust statistics: from classical to Bayesian analysis* (with C. Conigliani, M. Perone Pacifico and G. Salinetti), Metron, Vol.52 (3-4), 1994, 89–109. ISSN: 0026-1424.

Book Chapters/Proceedings

26. *Fair Division Algorithms and Experiments: A Short Review* (with D.Di Cagno and V. Fragnelli), Algorithmic Conflict Resolution – Fair

and Equitable Algorithms in Private Law (M.Dall’Aglío, M.Giacalone, F.Romeo, eds), 155–184, G.Giappichelli Editore, 2019, ISBN: 978-88-921-3131-6.

27. *Fair Division and the Law: How Real Cases Help Shape Allocation Procedures in the Legal Settings across European Countries*, Algorithmic Conflict Resolution – Fair and Equitable Algorithms in Private Law (M.Dall’Aglío, M.Giacalone, F.Romeo, eds), 185–222, G.Giappichelli Editore, 2019, ISBN: 978-88-921-3131-6.
28. *On the Manipulability of the Division of Two Items Among Two Agents Using a Bargaining Approach* (with V. Fragnelli), Algorithmic Conflict Resolution – Fair and Equitable Algorithms in Private Law (M.Dall’Aglío, M.Giacalone, F.Romeo, eds), 223–230, G.Giappichelli Editore, 2019, ISBN: 978-88-921-3131-6.
29. *Fair Division Procedures for the CREA Project*, Algorithmic Conflict Resolution – Fair and Equitable Algorithms in Private Law (M.Dall’Aglío, M.Giacalone, F.Romeo, eds), 231–272, G.Giappichelli Editore, 2019, ISBN: 978-88-921-3131-6.
30. *Algorithms in Conflict Resolution: A Lab Experiment* (with D.Di Cagno and F.Marazzi), Algorithmic Conflict Resolution – Fair and Equitable Algorithms in Private Law (M.Dall’Aglío, M.Giacalone, F.Romeo, eds), 273–296, G.Giappichelli Editore, 2019, ISBN: 978-88-921-3131-6.
31. *Orders of Criticality in Graph Connection Games* (with V.Fragnelli and Stefano Moretti), Transactions on Computational Collective Intelligence XXXIV (N. Thanh Nguyen, R. Kowalczyk, J. Mercik, A. Motylska-Kuźma,eds.), 35–46, Lecture Notes in Computer Science, Springer, 2019, ISBN: 9783662605547.
32. *Sometimes the computation of the Shapley Value is Simple* (with V.Fragnelli and Stefano Moretti), Handbook of the Shapley Value (E. Algaba, V. Fragnelli, J. Sanchez-Soriano, eds.), 441–462, CRC Press (Taylor & Francis), 2019, ISBN: 9780815374688.
33. *Indices of Criticality in Simple Games* (with V.Fragnelli and Stefano Moretti), Chapter 28 of Game Theoretic Analysis (L. A. Petrosyan, D. Wing Kay Yeung, eds.), 583–603, World Scientific Publishing, 2019, ISBN: 978-981-120-201-8.

34. *The Application of Fair Division Systems in Cases involving the Judicial Division of Assets* (with G.Morelli and F.Corona) In *Internet of Things* (E.Schweighofer, F.Kummer, A.Saarenpää eds.), *Internationales Rechtsinformatik Symposium IRIS*, 2019, 369–370. ISBN:9783964437242.
35. *CREA Project – Conflict Resolution Equitative Algorithms* (with F.Romeo and M.Giacalone) In *Dataschutz/Legal Tech*, (E.Schweighofer, F.Dolore, A.Saarenpää, B.Schafer eds.), *Internationales Rechtsinformatik Symposium IRIS*, 2018, 251–254. ISBN:9783906940212.
36. *Strategic games on defense trees* (with Stefano Bistarelli and Pamela Peretti), Chapter 1 (pp. 1-15) in “Formal Aspects in security and trust” (T. Dimitrakos, F. Martinelli P.Y. A. Ryan and S. Schneider, eds.), Vol. 4691/2007 in the “Lecture Notes in Computer Science” series, Springer Verlag, Berlin Heidelberg, 2007. ISBN: 3-540-75226-9.
37. *Optimization problems in fair division theory*. Chapter 20 in “Handbook on Analytic-Computational Methods in Applied Mathematics” (G. Anastassiou, ed.). Chapman & Hall/CRC Press, Boca Raton, U.S.A., 2000. ISBN: 1-58488-135-6.
38. *On Some Applications of LSIP to Probability and Statistics*. Chapter 11 (pp. 237–254) in “Semi-Infinite Programming: Recent Advances” (M.A. Goberna e M.A. López, eds.), Vol. 57 in the “Nonconvex Optimization And Its Applications” series, Kluwer Academic Publishers, Dordrecht, 2001. ISBN: 1-4020-0032-4.
39. *Ranking and unranking permutations with applications* (with Fabio Critani and Giuseppe Di Biase). *Innovation in Mathematics* (V.Keranen, A. Hietamaki, P. Mitic, eds.). Computational Mechanics Publications, Southhampton, UK, 1997. ISBN: 1-85312-5059.