



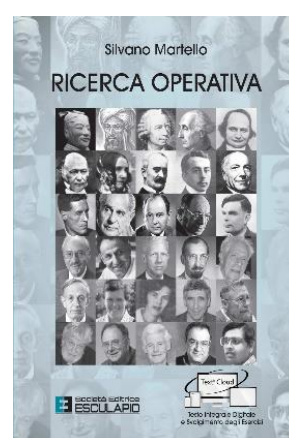
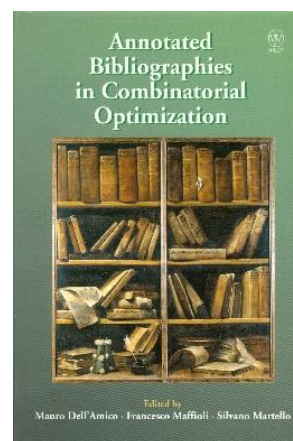
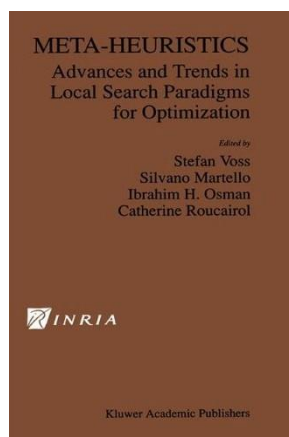
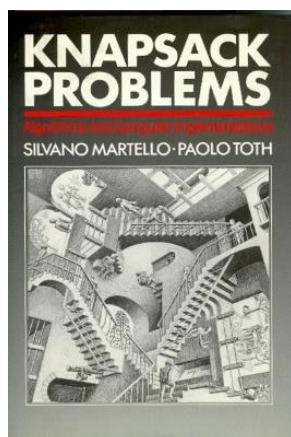
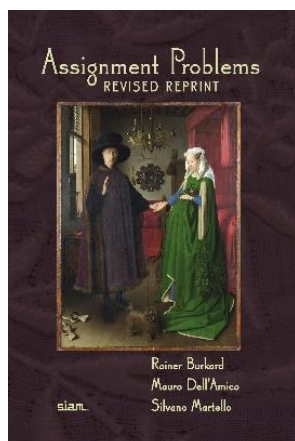
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Education and Academic Career:

- High School Diploma (classical studies), Liceo Minghetti, Bologna, 1967
- Laurea Degree in Electronic Engineering, University of Bologna, 1973
- 1974–1980: Teaching and scientific formation study grant, University of Bologna
- 1980–1985: Assistant Professor, University of Bologna
- 1985–1990: Associate Professor of Operations Research, University of Bologna
- 1990–1994: Full Professor of Operations Research and Management Science, University of Turin
- 1994–2018: Full Professor of Operations Research, University of Bologna
- 2018–2020: Alma Mater Honorary Professor, University of Bologna
- 2020–: Professor Emeritus, University of Bologna

Authored Books:

- [*Il Problema dell'Assegnamento: Metodi ed Algoritmi*](#), Consiglio Nazionale delle Ricerche, Roma, 1984 (with G. Carpaneto and P. Toth)
- [*Knapsack Problems: Algorithms and Computer Implementations*](#), John Wiley & Sons, Chichester-New York, 1990 (with P. Toth)
over 6000 citations on [Google Scholar](#) (as of December 2022); [free download](#)
- [*Assignment Problems*](#), SIAM, Philadelphia, 2009 and 2012 (with R. Burkard and M. Dell'Amico)
over 1800 citations on [Google Scholar](#) (as of December 2022)
- [*Ricerca Operativa per l'Economia e l'Impresa*](#), Esculapio, Bologna, 2022 (with M.G. Speranza)
- [*Ricerca Operativa*](#), Esculapio, Bologna, 2022

Edited Books:

- [*Surveys in Combinatorial Optimization*](#), North-Holland, Amsterdam, 1987 (co-edited with G. Laporte, M. Minoux and C. Ribeiro)
- [*Annotated Bibliographies in Combinatorial Optimization*](#), John Wiley & Sons, Chichester-New York, 1997 (co-edited with M. Dell'Amico and F. Maffioli)
- [*Meta-Heuristics: Advances and Trends in Local Search Paradigms for Optimization*](#), Kluwer Academic Publishers, Boston, 1999 (co-edited with S. Voss, I.H. Osman and C. Roucairol)
- [*Surveys in Operations Research*](#), Springer, New York, 2007 (co-edited with D. Bouyssou and F. Plastria)
- [*Surveys in Operations Research II*](#), Springer, New York, 2010 (co-edited with D. Bouyssou and F. Plastria)
- [*Surveys in Operations Research III*](#), Springer, New York, 2013 (co-edited with L. Liberti and T. Marchant)
- [*Computational Issues in Combinatorial Optimization*](#), Springer, New York, 2013 (co-edited with L.F. Escudero and V. Strusevich)
- [*Surveys in Operations Research IV*](#), Springer, New York, 2016 (co-edited with L. Liberti and T. Marchant)
- [*Seven Surveys in Operations Research*](#), Springer, New York, 2018 (co-edited with Y. Crama and M. Grabisch)
- [*Surveys in Operations Research VI*](#), Springer, New York, 2022 (co-edited with Y. Crama and M. Grabisch)

Editor-in Chief:

- [Ricerca Operativa](#) 1997–2002
- [4OR-A Quarterly Journal of Operations Research](#) 2003–

Editor/Area Editor/Associate Editor/Advisory Editor:

- [Advances in Operations Research](#) (2008–2017)
- [Computers & Industrial Engineering](#)
- [Discrete Applied Mathematics](#)
- [Discrete Optimization](#)
- [EURO Journal on Computational Optimization](#)
- [INFOR](#) (1988-2021)
- [Investigacion Operativa](#)
- [Journal of Heuristics](#) (1995-2018)
- [Journal of Operations and Logistics](#)
- [SIAM Monographs on Discrete Mathematics and Applications](#) (1998–2005)
- [Yugoslav Journal of Operations Research](#)

Guest Editor (special issues):

- [Knapsack, Packing and Cutting, Part I: One Dimensional Knapsack Problems](#), *INFOR* 32, 3, 1994
- [Knapsack, Packing and Cutting, Part II: Multidimensional Knapsack and Cutting Stock Problems](#), *INFOR* 32, 4, 1994
- [Algorithms and Experiments](#), *Discrete Applied Mathematics* 110, 2001 (with R. Battiti and A. Bertossi)
- [Combinatorial Optimization Symposium](#), *Discrete Applied Mathematics* 112, 1–3, 2001 (with M. Labbé and G. Laporte)
- [Graphs and Scheduling](#), *European Journal of Operational Research* 137, 2, 2002 (with J.-F. Maurras)
- [Graphs and Scheduling](#), *European Journal of Operational Research* 142, 2, 2002 (with G. Improta)
- [Logistics: From Theory to Application](#), *European Journal of Operational Research* 162, 1, 2005 (with E. Pesch)
- [Metaheuristics and Worst-case Guarantee Algorithms: Relations, Provable Properties and Applications](#), *European Journal of Operational Research* 166, 1, 2005 (with L.M. Gambardella)
- [Rich Models in Discrete Optimization: Formulation and Resolution](#), *European Journal of Operational Research* 175, 3, 2006 (with G. Hasle and A. Løkketangen)
- [Combinatorics for Modern Manufacturing, Logistics and Supply Chains](#), *European Journal of Operational Research* 189, 3, 2008 (with M. Kovalyov)
- [Developments in combinatorial optimization](#), *Computational Optimization and Applications* 48, 2, 2011 (with H. Vladimirou)
- [Combinatorial Optimization](#), *Journal of Scheduling* 14, 3, 2011 (with J. Blazewicz, V. Boljuncic, and J. Skorin-Kapov)
- [The Past and Present of Optimization](#), *European Journal of Operational Research* 219, 3, 2012 (with J.M. Paixao)

- [An Overview of Advances in Combinatorial Optimization Related Topics](#), *Optimization* 62, 10, 2013 (with G.-W. Weber and R. Kasimbeyli)
- [Advances in Combinatorial Optimization](#), *Discrete Applied Mathematics* 196, 2015 (with B. Ries)
- [Combinatorial optimization: Theory, computation, and applications](#), *Discrete Applied Mathematics* 217 Part 1, 2017 (with B. Chen and P. Gritzmann)
- [Computational Advances in Combinatorial Optimization](#), *Discrete Applied Mathematics* 242, 2018 (with T. Jordán and T. Kis)
- [Combinatorial Optimization: Between Practice and Theory](#), *Discrete Applied Mathematics* 264, 2019 (with A. Brodnik)
- [New Progress in Combinatorial Optimization](#), *Discrete Applied Mathematics* 290, 2021 (with B. Chen and B. Ries)
- [Theory and Applications in Combinatorial Optimization](#), *Journal of Combinatorial Optimization* 42, 2021 (with J. Gauci)

Honors



- [EURO Gold Medal](#) 2018.
[Laureate lecture: Assignments, Matchings, and the European Roots of Combinatorial Optimization](#)



- [IFORS Distinguished Lecturer](#) 2012
- [Omega Best Paper Award](#) 2018
- Member of the [Academy of Sciences of the Institute of Bologna](#)
- [Chairman of the European Chapter on Combinatorial Optimization](#) (over 1600 members) 1997–
- Vice-President of the [Association of European Operational Research Societies \(EURO\)](#) 2014–2018
- Invited plenary lectures delivered at major conferences in Austria, Belgium, Brazil, Canada, Croatia, Cuba, France, Germany, Great Britain, Italy, Japan, Mexico, Portugal, Russia, Slovenia, Spain, Tunisia, Turkey, Switzerland, and USA.
- Senior Fellow of the Center for Management of Operations and Logistics, University of Texas at Austin (1996–1999)

Research and publications:

- [Google Scholar profile](#) (over 23,000 citations, as of December 2022)
- [Papers reviewed on MathSciNet](#) (subscription to the American Mathematical Society needed outside University of Bologna)
- [Ranking of the World's Top 2% Scientists \(Stanford University\)](#)
- [h-index](#) = 60 (computed by [Google Scholar](#)). Also see [Top 10 Italian Scientists in Mathematics](#) and [Top H-Index For Scientists in Italy](#)
- [i10-index](#) = 117 (computed by [Google Scholar](#)).
- [i100-index](#) = 40 (computed by [Google Scholar](#)).
- [i1000-index](#) = 3 (computed by [Google Scholar](#)).
- Web of Science [h-index](#) = 35 (computed by [ISI Web of Knowledge](#))
- Scopus [h-index](#) = 39 (computed by [Scopus](#))
- [Erdős number](#) = 3 (via Dominique de Werra and Pavol Hell)

Selected publications 1977–

[217] L. Galli, S. Martello, C. Rey, P. Toth (2022). Lagrangian matheuristics for the quadratic multiple knapsack problem. *Discrete Applied Mathematics* (to appear).

[216] W. Wu, M. Iori, S. Martello, M. Yagiura (2022). An iterated dual substitution approach for binary integer programming problems under the min-max regret criterion. *INFORMS Journal on Computing* 34, 2523-2539, 2022.

[215] Y. Crama, M. Grabisch, S. Martello (eds.) (2022). *Surveys in Operations Research VI (Invited Surveys from "4OR", 2018-2020)*, Springer, New York, 315 pages.

[214] V. Cacchiani, M. Iori, A. Locatelli, S. Martello (2022). Knapsack problems — An overview of recent advances. Part II: Multiple, multidimensional, and quadratic knapsack problems, *Computers & Operations Research* 143, 105693.

[213] V. Cacchiani, M. Iori, A. Locatelli, S. Martello (2022). Knapsack problems — An overview of recent advances. Part I: Single knapsack problems, *Computers & Operations Research* 143, 105692.

[212] M. Iori, V.L. de Lima, S. Martello, M. Monaci (2022). 2DPackLib: a two-dimensional cutting and packing library, *Optimization Letters* 16, 471–480.

[211] Y. Crama, M. Grabisch, S. Martello (2022). Sixty-one surveys in operations research. *Annals of Operations Research* 314, 5–13.

[210] J. Gauci, S. Martello (eds.) (2021). *Special Issue: Theory and Applications in Combinatorial Optimization (ECCO 2019)*, *Journal of Combinatorial Optimization* 42.

- [209] L. Galli, S. Martello, C. Rey, P. Toth (2021). Polynomial-size formulations and relaxations for the quadratic multiple knapsack problem. *European Journal of Operational Research* 291, 8718–882.
- [208] J. Gauci, S. Martello (2021). Theory and Applications in Combinatorial Optimization, *Journal of Combinatorial Optimization* 42, 207–211.
- [207] S. Martello (2021). *Ricerca Operativa* (II Ed.), Esculapio, Bologna, x + 287 pages.
- [206] B. Chen, S. Martello, B. Ries (eds.) (2021). *Special Issue: New Progress in Combinatorial Optimization, Discrete Applied Mathematics* 290.
- [205] M. Iori, V.L. de Lima, S. Martello, F.K. Miyazawa, M. Monaci (2021). Exact solution techniques for two-dimensional cutting and packing. *European Journal of Operational Research* 289, 399–415.
- [204] B. Chen, S. Martello, B. Ries (2021). New progress in combinatorial optimization. *Discrete Applied Mathematics* 290, 68–415.
- [203] G. Homsí, J. Jordan, S. Martello, M. Monaci (2021). The assignment and loading transportation problem. *European Journal of Operational Research* 289, 999–1007.
- [202] Y. Crama, M. Grabisch, S. Martello (2021). 4OR comes of age. *4OR-A Quarterly Journal of Operations Research* 19, 1–13.
- [201] C. D'Ambrosio, S. Martello, M. Monaci (2020). Lower and upper bounds for the non-linear generalized assignment problem. *Computers & Operations Research* 120, 1–10.
- [200] S. Martello, M.G. Speranza (2020). *Ricerca Operativa per l'Economia e l'Impresa* (II Ed.), Esculapio, Bologna, x + 246 pages.
- [199] S. Martello, M. Monaci (2020). Algorithmic approaches to the multiple knapsack assignment problem. *Omega* 90, 1–11.
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- [197] A. Brodnik, S. Martello (eds.) (2019). *Special Issue: Combinatorial Optimization: Between Practice and Theory, Discrete Applied Mathematics* 264.
- [196] M. Dell'Amico, M. Delorme, M. Iori, S. Martello (2019). Mathematical models and decomposition methods for the multiple knapsack problem. *European Journal of Operational Research* 274, 886–899.
- [195] A. Brodnik, S. Martello (2019). Combinatorial Optimization: Between Practice and Theory. *Discrete Applied Mathematics* 264, 1–3.

- [194] Y. Crama, M. Grabisch, S. Martello (eds.) (2018). *Seven surveys in operations research*, Springer, New York, 278 pages.
- [193] W. Wu, M. Iori, S. Martello, M. Yagiura (2018). Exact and heuristic algorithms for the interval min-max regret generalized assignment problem, *Computers & Industrial Engineering* 125, 98–110.
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- [190] C. D'Ambrosio, S. Martello, L. Mencarelli (2018). Relaxations and heuristics for the multiple non-linear separable knapsack problem. *Computers & Operations Research* 93, 79–89.
- [189] Y. Crama, M. Grabisch, S. Martello (2018). Sweet sixteen. *4OR-A Quarterly Journal of Operations Research* 16, 1–13.
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- [187] T. Jordán, T. Kis, S. Martello (eds.) (2018). Special Issue: Computational Advances in Combinatorial Optimization, *Discrete Applied Mathematics* 242.
- [186] E. Malaguti, S. Martello, A.M. Santini (2018). The traveling salesman problem with pickups, deliveries, and draft limits. *Omega* 74, 50–58. Best Paper Award 2018
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- [182] B. Chen, P. Gritzmann, S. Martello (eds.) (2017). *Special Issue: Combinatorial optimization: Theory, computation, and applications*, *Discrete Applied Mathematics* 217 Part 1.
- [181] L. Mencarelli, C. D'Ambrosio, A. Di Zio, S. Martello (2016). Heuristics for the General Multiple Non-linear Knapsack Problem. *Electronic Notes in Discrete Mathematics* 55, 69–72.
- [180] Y. Crama, M. Grabisch, S. Martello (2016). A brand new cheating attempt: a case of usurped identity. *4OR-A Quarterly Journal of Operations Research* 14, 333–336.

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- [178] L. Liberti, T. Marchant, S. Martello (2016). Twelve surveys in operations research. *Annals of Operations Research* 204, 3–11.
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- [171] S. Martello, B. Ries (eds.) (2015). *Special Issue: Advances in Combinatorial Optimization*, *Discrete Applied Mathematics* 196.
- [170] A. Borghetti, C. D’Ambrosio, A. Lodi, S. Martello (2015). Optimal scheduling of a multiunit hydro power station in a short-term planning horizon. K.G. Murty, ed., *Case Studies in Operations Research*. Springer, New York, 167–181.
- [169] S. Martello (2014). *Ricerca Operativa*, Esculapio, Bologna, xii + 315 pages.
- [168] C. Cicconetti, L. Lenzini, A. Lodi, S. Martello, E. Mingozzi, M. Monaci (2014). Efficient two-dimensional data allocation in IEEE 802.16 OFDMA. *ACM/IEEE Transactions on Networking* 22, 1645–1658.
- [167] W. Wu, M. Iori, S. Martello and M. Yagiura (2014). Algorithms for the min-max regret generalized assignment problem with interval data. *Proceedings IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2014)*, 734–738. [Outstanding Paper Award](#)
- [166] R. Rovatti, C. D’Ambrosio, A. Lodi, S. Martello (2014). Optimistic MILP modeling of non-linear optimization problems. *European Journal of Operational Research* 239, 32–45.

- [165] S. Martello. Two-dimensional packing problems in telecommunications (2014). *Pesquisa Operacional* 34, 31–38.
- [164] G. Costa, C. D'Ambrosio, S. Martello (2014). GraphsJ 3: A modern didactic application for graph algorithms. *Journal of Computer Science* 10, 1115–1119.
- [163] A. Lodi, S. Martello, M. Monaci, D. Vigo (2014). Two-dimensional bin packing problems. V. Th. Paschos (ed.). *Paradigms of Combinatorial Optimization: Problems and New Approaches*, ISTE and John Wiley & Sons, 2nd edition, 107–129.
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- [161] M. Iori, S. Martello (2013). An annotated bibliography of combined routing and loading problems. *Yugoslav Journal of Operations Research* 23, 311–326.
- [160] E.G. Coffman, Jr, J. Csirik, G. Galambos, S. Martello, D. Vigo (2013). Bin packing approximation algorithms: Survey and classification. D.-Z. Du, P. M. Pardalos, R.L. Graham (eds.). *Handbook of Combinatorial Optimization*, 2nd Edition, Springer, 455–531.
- [159] L. Escudero, S. Martello, V. Strusevich (2013). An overview of computational issues in combinatorial optimization, *Annals of Operations Research* 207, 1–5.
- [158] A.E. Fernandes Muritiba, M. Iori, S. Martello, M.J. Negreiros Gomes (2013). Optimal design of fair layouts. *Flexible Services and Manufacturing Journal* 25, 443–461.
- [157] L. Liberti, T. Marchant, S. Martello (eds.) (2013). *Surveys in Operations Research III*, Springer, New York, 320 pages.
- [156] S. Martello, G.-W. Weber, Refail Kasimbeyli (eds.) (2013) Special Issue: An Overview of Advances in Combinatorial Optimization Related Topics, *Optimization* 62.
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- [152] S. Martello, J.M. Paixao (eds.) (2012) Feature Issue: The Past and Present of Optimization, *European Journal of Operational Research* 219.

- [151] R. Burkard, M. Dell'Amico, S. Martello (2012). Assignment Problems - Revised Reprint, SIAM, Philadelphia, xxii + 393 pages.
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- [146] A. Lodi, S. Martello, M. Monaci, C. Cicconetti, L. Lenzini, E. Mingozzi, C. Eklund, J. Moilanen (2011). Efficient two-dimensional packing algorithms for mobile WiMAX. Management Science 57, 2130-2144.
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- [144] C. Cicconetti, L. Lenzini, A. Lodi, S. Martello, E. Mingozzi, M. Monaci (2011). A Fast and Efficient Algorithm to Exploit Multi-user Diversity in IEEE 802.16 Band AMC. Computer Networks 55, 3680-3693.
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- [142] Y. Yamasaki, R. Schiavoni, M. Iori, M. Yagiura, S. Martello (2011). 排他制約付きナップザック問題における上界の計算法およびその有効性. S. Umetani (ed.). The evolution of optimization models and algorithms, RIMS Kôkyûroku 1726, 139-154.
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- [138] C. D'Ambrosio, S. Martello (2011). Heuristic algorithms for the general nonlinear separable knapsack problem. Computers & Operations Research 38, 505-513.

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- [136] M. Iori, S. Martello (2010). Rejoinder on: Routing problems with loading constraints. *TOP* 18, 41–42.
- [135] A.E. Fernandes Muritiba, M. Iori, S. Martello, M.J. Negreiros Gomes (2010). Models and algorithms for fair layout optimization problems. *Annals of Operations Research* 179, 5–14.
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- [131] S. Martello (2010). Jeno Egerváry: from the origins of the Hungarian algorithm to satellite communication. *Central European Journal of Operations Research* 18, 47–58.
- [130] C. D'Ambrosio, A. Lodi, S. Martello (2010). Piecewise linear approximation of functions of two variables in MILP models. *Operations Research Letters* 38 39–46.
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