

**Davide LA TORRE**  
Professor

Academy: Digitalization

Research center: SKEMA Centre for Analytics and Management Science

Campus: Sophia

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## Research interests

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Artificial Intelligence, Applied Mathematics, Mathematical and Statistical Modeling, Engineering Mathematics, Operations Research, Mathematical Economics, Mathematical Medicine, Optimisation and Control

## Teaching interests

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Applied Mathematics, Calculus, Computer Science, Engineering Mathematics, Mathematical Analysis, Mathematical Imaging, Mathematical Modeling, Operations Research

## Education

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|------|---|
| 2023 | Certification in the function of University Professor (Full Professor), Economic Theory (13 A1), Italy                                |
| 2023 | Certification in the function of University Professor (Associate Professor), Operations Research (01 A6), Italy                       |
| 2022 | Certification in the function of University-Professor (Full Professor) in Applied Mathematics (CNRS 26), France                       |
| 2022 | Certification in the function of University-Professor (Full Professor), Economics (CNRS 5), France                                    |
| 2022 | Certification in the function of University-Professor (Full Professor), Computer science (CNRS 27), France                            |
| 2021 | HDR in Applied Mathematics, Université Côte d'Azur, France  |
| 2020 | Certification in the function of University Professor (Associate Professor), Mathematical Analysis (01 A3), Italy                     |
| 2018 | Certification in the function of University Professor (Full Professor), Public Economics (13 A3), Italy                               |
| 2018 | Certification in the function of University Professor (Full Professor), Political Economy (13 A2), Italy                              |
| 2012 | Certification in the function of University Professor (Full Professor), Mathematical Methods for Economics and Finance (13 D4), Italy |
| 2002 | Ph.D. in Computational Mathematics and Operations Research, University of Milan, Italy  |
| 1997 | Master in Applied and Industrial Mathematics, University of Milan, Italy  |
| 1993 | Diploma (60/60) in Computer Science, ITIS Computer Science School, Italy  |

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| 2022 | Certificate in Artificial Intelligence in Health Care, Massachusetts Institute of Technology (MIT), United States of America   |
| 2021 | Certificate in Quantum Computing Fundamentals, Massachusetts Institute of Technology (MIT), United States of America   |
| 2021 | Certificate in Machine Learning, Modeling, and Simulation: Engineering Problem-Solving in the Age of AI, Massachusetts Institute of Technology (MIT), United States of America |
| 2021 | Certificate in Machine Learning, Modeling, and Simulation Principles, Massachusetts Institute of Technology (MIT), United States of America                                    |
| 2021 | Certificate in Applying Machine Learning to Engineering and Science, Massachusetts Institute of Technology (MIT), United States of America                                     |
| 2021 | Certificate in Quantum Algorithms for Cybersecurity, Chemistry, and Optimization, Massachusetts Institute of Technology (MIT), United States of America                        |
| 2017 | Certificate in Big Data and Social Analytics, Massachusetts Institute of Technology (MIT), United States of America  |
| 2017 | Certificate in Project Management, University of Adelaide, Australia   |
| 2017 | Certificate in Supply Chain Analytics, Massachusetts Institute of Technology (MIT), United States of America   |

## Experience

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### **Full-time academic positions**

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| Since 2019  | Full Professor (HDR with CNRS Professeur des Universités qualifications) of Applied Mathematics and Artificial Intelligence, SKEMA Business School, France  |
| Since 2000  | University Professor of Artificial Intelligence and Decision Sciences in Health and Medicine, University of Milan, Italy  |
| 2018 - 2019 | Full Professor, Dubai Business School, United Arab Emirates   |
| 2017 - 2018 | Full Professor and Department Chair, Nazarbayev University, Kazakhstan  |
| 2013 - 2016 | Associate Professor and Associate Department Chair (cross-appointed), Department of Applied Mathematics and Sciences, and Department of Industrial and System Engineering, Khalifa University, United Arab Emirates |

### **Other academic affiliations and appointments**

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|-------------|--|
| Since 2021  | Radiomics Board Member, European Institute of Oncology, Italy  |
| Since 2020  | Visiting Professor and Member of the Scientific Committee of the Artificial Intelligence Institute, Abu Dhabi School of Management, United Arab Emirates |
| Since 2019  | Member of the Doctoral School in Decision Sciences, Insubria University, Italy   |
| Since 2019  | Track Coordinator - Finance Specialization - Two Year MSc, SKEMA Business School, France   |
| Since 2015  | Adjunct Professor, University of Waterloo, Canada  |
| 2022 - 2023 | Associate Dean, SKEMA Business School, France  |
| 2020 - 2023 | Director of the Artificial Intelligence Institute, SKEMA Business School, France   |
| 2007 - 2023 | Adjunct Professor, Department of Mathematics and Statistics, University of Guelph, Canada  |
| 2019 - 2022 | Track Coordinator - L3/M1 PGE in Finance and Quants, SKEMA Business School, France   |
| 2020 - 2021 | Track Coordinator - L3/M1 PGE in Artificial Intelligence for Managers, SKEMA Business School, France   |
| 2019        | Visiting Professor, Universidad de Granada, Spain  |
| 2017 - 2018 | Department Chair, Nazarbayev University, Kazakhstan  |
| 2012        | Visiting Professor, Australian National University, Australia  |
| 2008        | Visiting Professor, Laurentian University, Canada  |

Other academic affiliations and appointments

|             |   |
|-------------|---|
| 2008        | Visiting Professor, University of York, Great Britain   |
| 2007        | Visiting Professor, University of York, Great Britain   |
| 2007        | Visiting Professor, Australian National University, Australia                                 |
| 2003 - 2005 | Program Head - Master in International Economics and Finance, University of Milan, Italy      |
| 2003 - 2005 | Program Head - Master in Data Analysis and Marketing Intelligence, University of Milan, Italy |
| 2001 - 2003 | Program Head - Master in Business Intelligence and Data Analysis, University of Milan, Italy  |

Research grants, Awards and Honors

Awards and Honors

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|------|---|
| 2023 | Best contribution to hybridization in AI, SKEMA Business School, France |
| 2022 | Most productive scholar award, SKEMA Business School, France            |
| 2021 | Outstanding research award, SKEMA Business School, France               |
| 2015 | Outstanding research award, Khalifa University, United Arab Emirates    |
| 2015 | Outstanding research award, University of Milan, Italy                  |

Research Grants

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| 2013 | Khalifa University KUIRF Level 2 (co-principal investigator), Khalifa University, United Arab Emirates |
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Publications

Peer-reviewed journal articles

LA TORRE, D., MENDIVIL, F. and ROCCA, M. (2024). Modeling portfolio efficiency using stochastic optimization with incomplete information and partial uncertainty. *Annals of Operations Research*, 334(1-3), pp. 241-263.

BROEKAERT, J., LA TORRE, D. and HAFIZ, F. (2024). Competing control scenarios in probabilistic SIR epidemics on social-contact networks. *Annals of Operations Research*, 336, pp. 2037-2060.

LA TORRE, D., MARSIGLIO, S., MENDIVIL, F. and PRIVILEGGI, F. (2024). Stochastic disease spreading and containment policies under state-dependent probabilities. *Economic Theory*, 77, pp. 127-168.

CAMACHO, C., DESBORDES, R. and LA TORRE, D. (2024). A time-space integro-differential economic model of epidemic control. *Economic Theory*, 77(1-2), pp. 307-348.

LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2024). Epidemic outbreaks and the optimal lockdown area: a spatial normative approach. *Economic Theory*, 77, pp. 349-411.

HAFIZ, F., BROEKAERT, J., LA TORRE, D. and SWAIN, A. (2024). A multi-criteria approach to evolve sparse neural architectures for stock market forecasting. *Annals of Operations Research*, 167(106680), pp. 1-45.

BROEKAERT, J., LA TORRE, D. and HAFIZ, F. (2024). The impact of the psychological effect of infectivity on Nash-balanced control strategies for epidemic networks. *Annals of Operations Research*.

FRASCA, M., LA TORRE, D., PRAVETTONI, G. and CUTICA, I. (2024). Explainable and interpretable artificial intelligence in medicine: a systematic bibliometric review. *Discover Artificial Intelligence*, 4(15), pp. 1-21.

LA TORRE, D., ZUCCOTTO, M., CASTELLINI, A., MOLA, L. and FARINELLI, A. (2024). Reinforcement learning applications in environmental sustainability: a review. *Artificial Intelligence Review*, 57(88), pp. 1-68.

MARVASO, G., ISAKSSON, L.J., ZAFFARONI, M., VINCINI, M.G., SUMMERS, P.E., PEPA, M. ... JERECZEK-FOSSA, B.A. (2024). Can we predict pathology without surgery? Weighing the added value of multiparametric MRI and whole prostate radiomics in integrative machine learning models. *European Radiology*.

BROEKAERT, J., LA TORRE, D., HAFIZ, F. and REPETTO, M. (2024). A comparative cost assessment of coalescing epidemic control strategies in heterogeneous social-contact networks. *Computers & Operations Research*.

- BERENGUER, M.I., GAMEZ, D., KUNZE, H., LA TORRE, D. and RUIZ GALAN, M. (2024). Solving direct and inverse problems for Fredholm-type integro-differential equations with application to pollution diffusion modeling. *Mathematics and Computers in Simulation*, 223, pp. 394-404.
- FRASCA, M., LA TORRE, D., PRAVETTONI, G. and CUTICA, I. (2024). Combining convolution neural networks with long-short term memory layers to predict Parkinson's disease progression. *International Transactions in Operational Research*, pp. 1-30.
- FRASCA, M. and LA TORRE, D. (2024). An extended Daugman's algorithm for iris with eye pathology recognition. *Expert Systems with Applications*, (124160), pp. 1-12.
- BRYSON, B., KUNZE, H., LA TORRE, D. and LIUZZI, D. (2023). A Generalized Multiple Criteria Data-Fitting Model With Sparsity and Entropy With Application to Growth Forecasting. *IEEE Transactions on Engineering Management*, 70(5), pp. 1900-1911.
- BEN ABDELAZIZ, F. and LA TORRE, D. (2023). Robust generalized Merton-type financial portfolio models with generalized utility. *Annals of Operations Research*, 330, pp. 55-72.
- LA TORRE, D., COLAPINTO, C., DUROSINI, I. and TRIBERTI, S. (2023). Team Formation for Human-Artificial Intelligence Collaboration in the Workplace: A Goal Programming Model to Foster Organizational Change. *IEEE Transactions on Engineering Management*, 70(5), pp. 1966-1976.
- BRUSSET, X., JEBALI, A. and LA TORRE, D. (2023). Production optimisation in a pandemic context. *International Journal of Production Research*, 61(5), pp. 1642-1663.
- BRUSSET, X., DAVARI, M., KINRA, A. and LA TORRE, D. (2023). Modelling ripple effect propagation and global supply chain workforce productivity impacts in pandemic disruptions. *International Journal of Production Research*, 61(8), pp. 2493-2512.
- BRUSSET, X., JEBALI, A., LA TORRE, D. and LIUZZI, D. (2023). Production optimization in the time of pandemic: an SIS-based optimal control model with protection effort and cost minimization. *Annals of Operations Research*.
- TRIBERTI, S., LA TORRE, D. and RIVA, G. (2023). The Artificial Face (ART-F) Project: Addressing the Problem of Interpretability, Interface, and Trust in Artificial Intelligence. *Cyberpsychology, Behavior, and Social Networking*, 26(4), pp. 318-320.
- BUCCI, A., LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2023). A network-based economic growth model with endogenous migration and poverty traps. *Metroeconomica*, 74(4), pp. 833-857.
- LA TORRE, D., MARSIGLIO, S. and PRIVILEGGI, F. (2023). Infectious diseases and social distancing under state-dependent probabilities. *Annals of Operations Research*, pp. 1-20.
- HAFIZ, F., BROEKAERT, J., LA TORRE, D. and SWAIN, A. (2023). Co-evolution of Neural Architectures and Features for Stock Market Forecasting: A Multi-objective Decision Perspective. *Decision Support Systems*, 174, pp. 114015.
- BRUSSET, X., IVANOV, D., JEBALI, A., LA TORRE, D. and REPETTO, M. (2023). A dynamic approach to supply chain reconfiguration and ripple effect analysis in an epidemic. *International Journal of Production Economics*, 263, pp. 108935.
- BERENGUER, M.I., GAMEZ, D., GARRALDA-GUILLEM, A.I., KUNZE, H., LA TORRE, D. and RUIZ GALAN, M. (2023). Solving inverse problems for mixed-variational equations on perforated domains. *Computational and Applied Mathematics*, 42(297).
- VINCINI, M.G., MARVASO, G., ISAKSSON, L.J., ZAFFARONI, M., PEPA, M., CORRAO, G. ... JERECZEK-FOSSA, B.A. (2023). PO-2101 Added Value Of MRI Radiomics To Predict Pathological Status Of Prostate Cancer Patients. *Radiotherapy and Oncology*, 182(1), pp. S1884-S1886.
- VOLPE, S., ZAFFARONI, M., PIPERNO, G., VINCINI, M.G., ZERELLA, M.A., MASTROLEO, F. ... JERECZEK-FOSSA, B.A. (2023). Multi-omics integrative modelling for stereotactic body radiotherapy in early-stage non-small cell lung cancer: clinical trial protocol of the MONDRIAN study. *BMC Cancer*, 23(1), pp. 1236.
- ISAKSSON, L.J., REPETTO, M., SUMMERS, P.E., PEPA, M., ZAFFARONI, M., VINCINI, M.G. ... JERECZEK-FOSSA, B.A. (2023). High-performance prediction models for prostate cancer radiomics. *Informatics in Medicine Unlocked*, 37, pp. 101161.

- VINCINI, M.G., MARVASO, G., ISAKSSON, L.J., ZAFFARONI, M., PEPA, M., CORRAO, G. ... JERECZEK-FOSSA, B.A. (2023). Added value of MRI radiomics to predict pathological status of prostate cancer patients. *European Urology*, 83, pp. S1799-S1800.
- KUNZE, H. and LA TORRE, D. (2022). Solving inverse problems for steady-state equations using a multiple criteria model with collage distance, entropy, and sparsity. *Annals of Operations Research*, 311, pp. 1051-1065.
- LA TORRE, D. and MENDIVIL, F. (2022). Stochastic efficiency and inefficiency in portfolio optimization with incomplete information: a set-valued probability approach. *Annals of Operations Research*, 311, pp. 1085-1098.
- KUNZE, H., LA TORRE, D. and MARSIGLIO, S. (2022). Sustainability and spatial spillovers in a multicriteria macroeconomics model. *Annals of Operations Research*, 311, pp. 1067-1084.
- LA TORRE, D., LIUZZI, D., MAGGISTRO, R. and MARSIGLIO, S. (2022). Mobility Choices and Strategic Interactions in a Two-Group Macroeconomic-Epidemiological Model. *Dynamic Games and Applications*, 12, pp. 110-132.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2022). Geographical heterogeneities and externalities in an epidemiological-macroeconomic framework. *Journal of Public Economic Theory*, 24(5), pp. 1154-1181.
- BRUSSET, X., JEBALI, A., LA TORRE, D. and MAZAHIR, S. (2022). Optimal Pollution Control in a Dynamic Multi-echelon Supply Chain. *Environmental Modelling and Assessment*, 27, pp. 585-598.
- LA TORRE, D., LIUZZI, D., REPETTO, M. and ROCCA, M. (2022). Enhancing deep learning algorithm accuracy and stability using multicriteria optimization: an application to distributed learning with MNIST digits. *Annals of Operations Research*.
- LA TORRE, D., BEN ABDELAZIZ, F. and ALAYA, H. (2021). Dynamic Programming and Optimal Control for Vector-Valued Functions: A State-of-the-art Review. *RAIRO - Operations Research*, 55, pp. 351-364.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2021). Epidemics and macroeconomic outcomes: Social distancing intensity and duration. *Journal of Mathematical Economics*, 93, pp. 102473.
- OTERO, D., LA TORRE, D., MICHAILOVICH, O. and VRSCAY, E. (2021). Optimization of structural similarity in mathematical imaging. *Optimization and Engineering*, 22, pp. 2367-2401.
- LA TORRE, D., MARSIGLIO, S., MENDIVIL, F. and PRIVILEGGI, F. (2021). Public Debt Dynamics under Ambiguity by Means of Iterated Function Systems on Density Functions. *Discrete and Continuous Dynamical Systems Series B*, 26(11), pp. 5873-5903.
- LI, D., LA TORRE, D. and VRSCAY, E. (2021). The intensity-based measure approach to "Weberize" L2-based methods of signal and image approximation. *Optimization and Engineering*, 22, pp. 2321-2347.
- URBANIAK, I.A., KUNZE, A., LI, D., LA TORRE, D. and VRSCAY, E. (2021). The use of intensity-dependent weight functions to "Weberize" L2-based methods of signal and image approximation. *Optimization and Engineering*, 22, pp. 2349-2365.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2021). Transboundary pollution externalities: Think globally, act locally? *Journal of Mathematical Economics*, 96, pp. 102511.
- KHAN, F. and LA TORRE, D. (2021). Quantum information technology and innovation: a brief history; current state and future perspectives for business and management. *Technology Analysis and Strategic Management*, 33(11), pp. 1281-1289.
- KUNZE, H., LA TORRE, D. and GALÁN, M.R. (2021). Optimization methods in inverse problems and applications to science and engineering. *Optimization and Engineering*, 22(4), pp. 2151-2158.
- COLAPINTO, C., JAYARAMAN, R. and LA TORRE, D. (2020). A goal programming model to study the impact of R&D expenditures on sustainability-related criteria: the case of Kazakhstan. *Management Decision*, 58(11), pp. 2497-2512.
- LA TORRE, D. and MARSIGLIO, S. (2020). A note on optimal debt reduction policies. *Macroeconomic Dynamics*, 24(7), pp. 1850-1860.
- BEN ABDELAZIZ, F., COLAPINTO, C., LA TORRE, D. and LIUZZI, D. (2020). A Stochastic Dynamic Multiobjective Model for Sustainable Decision Making. *Annals of Operations Research*, 293, pp. 539-556.

- LA TORRE, D., MARCOUX, J., MENDIVIL, F. and VRSCAY, E. (2020). Denoising of diffusion magnetic resonance images using a modified and differentiable Monge-Kantorovich distance for measure-valued images. *Communications in Nonlinear Science and Numerical Simulation*, 91, pp. 105456.
- COLAPINTO, C., JAYARAMAN, R., BEN ABDELAZIZ, F. and LA TORRE, D. (2020). Environmental Sustainability and Multifaceted Development: Multi-Criteria Decision Models with Applications. *Annals of Operations Research*, 293, pp. 405-432.
- LA TORRE, D., BOUBAKER, S., PÉREZ GLADISH, B. and ZOPOUNIDIS, C. (2020). Multidimensional Finance, Insurance and Investment. *International Transactions in Operational Research*, 27(5), pp. 2689-2690.
- LA TORRE, D., MALIK, T. and MARSIGLIO, S. (2020). Optimal control of prevention and treatment in a basic macroeconomic-epidemiological model. *Mathematical Social Sciences*, 108, pp. 100-108.
- GARRALDA-GUILLEM, A.I., KUNZE, H., LA TORRE, D. and GALAN, M.R. (2020). Using the Generalized Collage Theorem for Estimating Unknown Parameters in Perturbed Mixed Variational Equations. *Communications in Nonlinear Science and Numerical Simulation*, 91, pp. 105433.
- SHAROMI, O., LA TORRE, D. and MALIK, T. (2019). A multiple criteria economic growth model with environmental quality and logistic population behaviour with variable carrying capacity. *INFOR*, 57(3), pp. 379-393.
- LA TORRE, D., MENDIVIL, F., MARSIGLIO, S. and PRIVILEGGI, F. (2019). A stochastic economic growth model with health capital and state-dependent probabilities. *Chaos, Solitons, and Fractals*, 129, pp. 81-93.
- BUCCI, A., LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2019). Financial contagion and economic development: An epidemiological approach. *Journal of Economic Behavior and Organization*, 162, pp. 211-228.
- COLAPINTO, C., LA TORRE, D. and AOUNI, B. (2019). Goal programming for financial portfolio management: a state-of-the-art review. *Operational Research: An International Journal*, 19, pp. 717-736.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2019). Population and geography do matter for sustainable development. *Environment and Development Economics*, 24(2), pp. 201-223.
- VIE, A., COLAPINTO, C., LA TORRE, D. and LIUZZI, D. (2019). The long-run sustainability of the European Union countries: Assessing the Europe 2020 strategy through a fuzzy goal programming model. *Management Decision*, 57(2), pp. 523-542.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2019). The optimal population size under pollution and migration externalities: a spatial control approach. *Mathematical Modelling of Natural Phenomena*, 14(1), pp. 1-15.
- LA TORRE, D. and MARSIGLIO, S. (2018). Economic Growth and Abatement Activities in a Stochastic Environment: a Multi-Objective Approach. *Annals of Operations Research*, 267, pp. 321-334.
- LA TORRE, D., MARSIGLIO, S., MENDIVIL, F. and PRIVILEGGI, F. (2018). Fractal attractors and singular invariant measures in two-sector growth models with random factor shares. *Communications in Nonlinear Science and Numerical Simulation*, 58, pp. 185-201.
- LA TORRE, D., MARSIGLIO, S. and PRIVILEGGI, F. (2018). Fractal attractors in economic growth models with random pollution externalities. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 28(5).
- LA TORRE, D. and MENDIVIL, F. (2018). Portfolio optimization under partial uncertainty and incomplete information: a probability multimeasure-based approach. *Annals of Operations Research*, 267, pp. 267-279.
- LA TORRE, D. and MENDIVIL, F. (2018). Stochastic linear optimization under partial uncertainty and incomplete information using the notion of probability multimeasure. *Journal of the Operational Research Society*, 69(10), pp. 1549-1556.
- JAYARAMAN, R., COLAPINTO, C., LA TORRE, D. and MALIK, T. (2017). A Weighted Goal Programming model for planning sustainable development applied to Gulf Cooperation Council Countries. *Applied Energy*, 185(Part 2), pp. 1931-1939.
- LA TORRE, D. (2017). Preface: Multiple criteria optimization and goal programming in science, engineering, and social sciences. *Annals of Operations Research*, 251, pp. 1-5.
- OTERO, D., LA TORRE, D., MICHAILOVICH, O. and VRSCAY, E. (2017). On the theory of function-valued mappings and its application to the processing of hyperspectral images. *Signal Processing*, 134, pp. 185-196.

- ANITA, S., CAPASSO, V., KUNZE, H. and LA TORRE, D. (2017). Optimizing Environmental Taxation on Physical Capital for a Spatially Structured Economic Growth Model Including Pollution Diffusion. *Vietnam Journal of Mathematics*, 45, pp. 199-206.
- JAYARAMAN, R., COLAPINTO, C., LIUZZI, D. and LA TORRE, D. (2017). Planning sustainable development through a scenario-based stochastic goal programming model. *Operational Research: An International Journal*, 17, pp. 789-805.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2017). Pollution Control under Uncertainty and Sustainability Concern. *Environmental and Resource Economics*, 67, pp. 885-903.
- BERENGUER, M.I., KUNZE, H., LA TORRE, D. and RUIZ GALAN, M. (2016). Galerkin method for constrained variational equations and a collage-based approach to related inverse problems. *Journal of Computational and Applied Mathematics*, 292, pp. 67-75.
- LA TORRE, D., MENDIVIL, F. and VRSCAY, E. (2016). Iterated Function Systems On Functions Of Bounded Variation. *Fractals*, 24(2), pp. 1650019.
- LEVERE, K.M., KUNZE, H. and LA TORRE, D. (2015). A collage-based approach to solving inverse problems for second-order nonlinear hyperbolic PDEs. *Communications in Nonlinear Science and Numerical Simulation*, 29(1-3), pp. 283-299.
- ANITA, S., CAPASSO, V., KUNZE, H. and LA TORRE, D. (2015). Dynamics and control of an integro-differential system of geographical economics. *Annals of the Academy of Romanian Scientists: Series on Mathematics and its Applications*, 7(1), pp. 8-26.
- ANITA, S., CAPASSO, V., KUNZE, H. and LA TORRE, D. (2015). Dynamics and optimal control in a spatially structured economic growth model with pollution diffusion and environmental taxation. *Applied Mathematics Letters*, 42, pp. 36-40.
- JAYARAMAN, R., COLAPINTO, C., LA TORRE, D. and MALIK, T. (2015). Multi-criteria model for sustainable development using goal programming applied to the United Arab Emirates. *Energy Policy*, 87, pp. 447-454.
- JAYARAMAN, R., LA TORRE, D., MALIK, T. and PEARSON, Y. (2015). Optimal Work Force Allocation for Energy, Economic and Environmental Sustainability in the United Arab Emirates: A Goal Programming Approach. *Energy Procedia*, 75, pp. 2999-3006.
- LA TORRE, D., LIUZZI, D. and MARSIGLIO, S. (2015). Pollution Diffusion and Abatement Activities across Space and over Time. *Mathematical Social Sciences*, 78, pp. 48-63.
- LA TORRE, D., MENDIVIL, F., MARSIGLIO, S. and PRIVILEGGI, F. (2015). Self-similar measures in multi-sector endogenous growth models. *Chaos, Solitons, and Fractals*, 79, pp. 40-56.
- LA TORRE, D. and MENDIVIL, F. (2015). The Monge-Kantorovich Metric on Multimeasures and Self-Similar Multimeasures. *Set-Valued and Variational Analysis*, 23, pp. 319-331.
- AOUNI, B., COLAPINTO, C. and LA TORRE, D. (2014). Financial Portfolio Management through Goal Programming: State-of-the-art. *European Journal of Operational Research*, 234(2), pp. 536-545.
- PERTILE, P., FOSTER, M. and LA TORRE, D. (2014). Optimal bayesian sequential sampling rules for the economic evaluation of health technologies. *Journal of the Royal Statistical Society, Series A*, 177(2), pp. 419-438.
- FORSTER, M., LA TORRE, D. and LAMBERT, P. (2014). Optimal control of inequality under uncertainty. *Mathematical Social Sciences*, 68, pp. 53-59.
- AOUNI, B., COLAPINTO, C. and LA TORRE, D. (2013). A cardinality constrained goal programming model with satisfaction function for venture capital investment decision making. *Annals of Operations Research*, 205, pp. 77-88.
- LA TORRE, D. and MENDIVIL, F. (2013). A Chaos game algorithm for generalized iterated function systems. *Applied Mathematics & Computations*, 224, pp. 238-249.
- ANITA, S., CAPASSO, V., KUNZE, H. and LA TORRE, D. (2013). Optimal control and long-run dynamics for a spatial economic growth model with physical capital accumulation and pollution diffusion. *Applied Mathematics Letters*, 26(8), pp. 908-912.
- MARSIGLIO, S. and LA TORRE, D. (2012). A note on demographic shocks in a multi-sector growth model. *Economics Bulletin*, 32(2), pp. 2293-2299.

- BUCCI, A., FLORIO, M. and LA TORRE, D. (2012). Government spending and growth in second-best economies. *Economic Modelling*, 29(3), pp. 654-663.
- MARSIGLIO, S. and LA TORRE, D. (2012). Population growth and utilitarian criteria in the Lucas-Uzawa model. *Economic Modelling*, 29(4), pp. 1197-1204.
- AOUNI, B., BEN ABDELAZIZ, F. and LA TORRE, D. (2012). The Stochastic Goal Programming Model: Theory and Applications. *Journal of Multi-Criteria Decision Analysis*, 19(5-6), pp. 185-200.
- LA TORRE, D., POPOVICI, N. and ROCCA, M. (2011). A note on explicitly quasiconvex set-valued maps. *Journal of Nonlinear and Convex Analysis*, 12(1), pp. 113-118.
- BUCCI, A., COLAPINTO, C., FORSTER, M. and LA TORRE, D. (2011). Stochastic technology shocks in an extended Uzawa-Lucas model: closed-form solution and long-run dynamics. *Journal of Economics*, 103, pp. 83-99.
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## Other research activities ---

### Chief editor

2012 - 2020      International Journal of Applied Nonlinear Science

### Editorial board member

Since 2024      Annals of Operations Research

Since 2022      Discover Artificial Intelligence

Since 2022      Engineering Management Journal

Since 2022      Journal of Modelling in Management

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| Since 2022  | International Transactions in Operational Research         |
| Since 2021  | Data Science in Finance and Economics                      |
| 2013 - 2020 | Mathematical Problems in Engineering                       |
| 2012 - 2020 | International Journal of Computing Science and Mathematics |
| 2009 - 2019 | International Journal of Mathematics and Statistics        |
| 2012 - 2018 | Data Envelopment Analysis and Decision Science             |
| 2011 - 2014 | International Journal of Portfolio Analysis and Management |

### **Reviewer for:**

Annals of Operations Research, Chaos, Solitons, and Fractals, Computational Economics, Journal of the Operational Research Society

### **PhD supervision**

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| 2018 | N. BAGHERI, The University of Dubai, PhD thesis, Thesis Reviewer                                     |
| 2015 | D. LIUZZI, Università degli Studi di Milano "La Statale", PhD thesis, Thesis director                |
| 2012 | K. LEVERE, University of Guelph, PhD thesis, Thesis co-director                                      |
| 2012 | M. DEMERS, PhD thesis, Thesis co-director  |
| 2012 | E. C. RICCI, PhD thesis, Thesis co-director  |
| 2011 | S. MARSIGLIO, Università degli Studi di Milano "La Statale", PhD thesis, Thesis director             |
| 2008 | L. ORSI, Università degli Studi di Milano "La Statale", PhD thesis, Thesis director                  |