# FRANCO PELLEREY CURRICULUM VITAE ET STUDIORUM

Dipartimento di Scienze Matematiche Politecnico di Torino Corso Duca degli Abruzzi 24 I-10129 TORINO (ITALY) TEL: +39.011.5647541 E-MAIL: franco.pellerey@polito.it URL: https://staff.polito.it/franco.pellerey/ ORCID: https://orcid.org/0000-0002-8983-855X

Torino, January 2nd, 2023

# EDUCATIONAL QUALIFICATIONS

- **M.S. in Mathematics**, Università di Torino, July 1988. Thesis entitled *Generalizations of the classical epidemiological model and numerical simulations*.
- **Ph.D. in Computational Mathematics and Operations Research**. Università di Milano, June 1993. Thesis entitled *Reliability Characterizations and Partial Stochastic Orders for Shock Models*.

# **EMPLOYEMENT RECORD**

- Assistant Professor Probability and Mathematical Statistics, November 1994 October 1998 (Università di Urbino and Politecnico di Torino).
- Associate Professor Mathematical Methods for Economics, Actuarial Sciences and Finance, November 1998 – October 2003 (Università di Bergamo and Politecnico di Torino).
- Associate Professor Probability and Mathematical Statistics, November 2003 December 2010 (Politecnico di Torino).
- **Full Professor** Probability and Mathematical Statistics, December 2010 (Politecnico di Torino).

# EXPERIENCE IN UNIVERSITY ADMINISTRATION (selection)

- Member of the Board of the **PhD Committee** in Environment and Territory, Politecnico di Torino (2005-2006).
- Member of the Board of the **PhD Committee**, PhD in Pure and Applied, Politecnico di Torino and Università di Torino (2007 ).
- Vice-Dean of the Faculty of Architecture, Politecnico di Torino (2007-2010).
- Member of the **Executive Board** of the Department of Mathematics, Politecnico di Torino (2008 2019).
- Member of the **Executive Board** of the Electronic Engineering, Telecommunications and Physics School, Politecnico di Torino (2012-2015, 2018-).
- **Coordinator** of the Education Committee of the Department of Mathematical Sciences, Politecnico di Torino (2012 ).
- **Deputy Head of the Department** of Mathematical Sciences, Politecnico di Torino (2015-2019)
- Member of the **Scientific Board** of the Responsible Risk Resilience Center (R3C), Politecnico di Torino (2018 )

# TEACHING

Since the beginning of his career, he held the following courses (In brackets, the number of times).

### Bachelor and Master courses:

- Matematica Generale Politecnico di Torino (11)
- Statistica Inferenziale Politecnico di Torino (8)
- Statistica Politecnico di Torino (3)
- Stochastic Processes (in English) Politecnico di Torino (12)
- Processi Stocastici Politecnico di Torino (2)
- Calcolo delle Probabilità Politecnico di Torino (9)
- Complementi di Analisi e Calcolo delle Probabilità Politecnico di Torino (1)
- Metodi Matematici per Ingegneria (module of Probability) Politecnico di Torino (9)
- Mathematical Methods (in English) Politecnico di Torino (3)
- Fundamentals of Mathematics II (in English) ESCP Europe (3)
- Analisi Matematica 1 Politecnico di Torino (3)
- Elaborazione Statistica dei Dati Politecnico di Torino (5)
- Fondamenti di Informatica Politecnico di Torino (2)
- Experimental Statistics and Mechanical Measurements (in English) Turin Tashkent Politechnic University (8)
- Mass Appraisal e Modelli Statistici non Parametrici Master COREP Politecnico di Torino (7)
- Elaborazione Automatica dei Dati per le Decisioni Economiche e Finanziarie Economia Università di Bergamo (1)
- Metodi Probabilistici, Statistici e Processi Stocastici Università di Urbino (1)

# Ph.D. courses:

- Processi Stocastici in Campo Assicurativo e Finanziario: una panoramica, Università di Torino, 2011;
- Confronti Stocastici ed Applicazioni, Politecnico di Torino, 2007;
- Statistica Multivariata ed Applicazioni, Politecnico di Torino, 2007;
- Dependence Orders, Dependence Concepts and Applications in Reliability and Actuarial Sciences, University of Xiamen, China, 2010, and Politecnico di Torino, 2011
- Stochastic Processes and their Applications, Politecnico di Torino, 2012 (with P. Siri e M. Santacroce)
- Advanced Statistical Methods, Politecnico di Torino, 2014, 2016 and 2018 (with P. Brandimarte, R. Fontana e M. Gasparini);
- *Statistical Learning,* Politecnico di Torino, 2019, 2020 (with R. Fontana e M. Gasparini);

He has also given courses of introduction to multivariate statistics and massive estimation at regional offices (Turin, Milan, Rome, Bari) of the *Scuola Superiore dell'Economia e delle Finanze* (Higher School of Economics and Finance), Italian Ministry of Economy and Finance.

#### **RESEARCH INTERESTS**

- **Stochastic orders**: properties, mutual relationships, closures, applications in risk theory and actuarial sciences. Comparisons of stochastic processes and applications in population dynamics.
- **Dependence orders and positive dependence notions**: closure properties and characterizations, applications in actuarial sciences, reliability and social sciences.
- Non parametrical classification of lifetimes distributions: closure properties, equivalent definitions, characterizations of reliability classes, applications in operations research and engineering fields.
- Applied multivariate statistics in engineering and social sciences.

# **RESEARCH PROJECTS**

- **Coordinator** of the Turin Local Unit "Continuous-time models of asset pricing in presence of insider traders." of the PRIN Research Project "Heterogeneous beliefs and value of knowledge" (National Coordinator Prof. Marco Li Calzi, 2001-2003).
- **Coordinator** of the Turin Local Unit "Supermodular and directionally convex orders and their applications in insurance, risk and portfolio theory." of the PRIN Research Project "Concepts of Supermodularity in Economics" (National Coordinator Prof. Massimo Marinacci, 2002-2004).
- Scientific Director of the Polytechnic industrial project "Nonlinear multivariate statistical models in industry: identification and calibrations of models, and problems related to the design of experiments for analysis of data from measurements with X-rays, "Project X-ray Fat Analyzer as part of Research Projects Industrial and/or Experimental Development of the Piedmont Region (2012-2013).
- Scientific Director of the third parties research contract "Application of multivariate statistical analysis to vibration monitoring of rotating parts of the transmission system of the helicopters", signed between AgustaWestland and the Polytechnic of Turin (2013-2015).

# INVITED TALKS (selection)

- The Iterated Equilibrium Distributions' Sequence and its Applications (plenary talk), *Workshop on Statistical Inference under Non–Standard Conditions*, Panjab University di Chandigarh (India), 1996.
- Stochastic Comparison for Multivariate Shock Models (plenary talk), *International Conference on Reliability and Survival Analysis*, Northern Illinois University di DeKalb (Illinois), 1998.
- Convex ordering for integrated telegrapher's processes, *Third International Conference on Mathematical Methods in Reliability*, Norwegian University of Science and Technology, Trondheim (Norway), 2002.
- On random sums with dependence between summands and number of summands, *Third International Workshop on Applied Probability*, University of Connecticut, Storrs (USA), 2006.
- On Aging Properties for Bivariate Lifetimes with Archimedean Survival Copulas, *Fifth International Conference on Mathematical Methods in Reliability*, University of Strathclyde, Glasgow (UK), 2007.
- Bisexual Galton-Watson Branching Processes in Random Environments, *BIOCOMP 2007 Collective Dynamics: Topics on Competition and Cooperation in the Biosciences*, Vietri sul Mare, Italy, 2007.
- Stochastic Comparisons of Residual Lifetimes in Multivariate Frailty Models, *Sixth International Conference on Mathematical Methods in Reliability*, Gubkin Russian State Oil and Gas University, Moscow (Russia), 2009.

- Multivariate aging properties and stochastic comparisons under Archimedean dependence structures: a survey, *Workshop on Copula Theory and Its Applications*, University of Warsaw, (Poland), 2009.
- On the reliability of series and parallel systems with randomized components, *Seventh International Conference on Mathematical Methods in Reliability*, Beijing Institute of Technology, Beijing (Cina), 2011.
- Stochastic Orders Between Used Systems and Systems with Used Components (planary talk), *SORR2011, International Workshop on Stochastic Orders in Reliability and Risk Management*, Xiamen University (Cina), 2011.
- Dependence orders for vector functions of independent random variables, *International Workshop on Applied Probability 2012,* Jerusalem (Israel), 2012.
- A framework for the supermodular comparison of models incorporating individual and common factors (plenary talk), *International Conference on Marshall-Olkin Distributions:* Advances in Theory and Applications, Bologna, Italy, 2013.
- Univariate stochastic orders and joint stochastic orders: conditions on the copula for mutual relationships, *First Joint International Meeting RSME-SCM-SEMA-SIMAI-UMI*, Bilbao (Spain), 2014.
- Standard stochastic orders and joint stochastic orders: conditions on survival copulas for mutual relationships, *Ninth International Conference on Mathematical Methods in Reliability*, University of Tsukuba, Tokyo (Japan), 2015.
- On componentwise unimodality of copulas, *Conference on Dependence and Risk Measures*, Università Milano-Bicocca, 2015.
- Contribution of POLITO to the Uzbek educational system, *Tashkent International Innovation Forum*, Tashkent (Uzbekistan), 2016.
- On mutual relationships between joint stochastic orders and standard stochastic orders, *International workshop on Mathematical Reliability and Safety*, XuZhou (China), 2016.
- Standard stochastic orders and joint stochastic orders: mutual relationships based on copulas, *13th Iranian Statistical Conference*, Kerman (Iran), 2016
- An application of copulae in the analysis of sand transport phenomena, 10th International Conference of the ERCIM WG on Computational and Methodological Statistics, London, 2017.
- On the role of dependence in residual lifetimes, *Stochastic Modeling on Complex Systems,* On-line conference (Italy), 2020.

# INVITED SEMINAR OUTSIDE ITALY (selection)

Universidad de Murcia, Spain (2005), Universidad de Sevilla, Spain (2005), Universidad Carlos III de Madrid, Spain (2008), Universidad de Cadiz, Spain (2010), University of Xiamen, Cina (2010), University of Haifa (2013), Turin Polytechnic University in Tashkent (2016).

#### TRAINING OF EARLY-STAGE RESEARCHERS

During his career he devoted long time in training activities for young italian and foreign PhD students and researchers. Among others: P. Semeraro, K. Petakos, C. Zucca, M. Kayid, X. Gao, S. Ortobelli, M. Carletti, J. Mulero, R. Rodriguez–Grignolo, H. Llaniado Rodas, S. Yasaei Sekeh, S. Zalzadeh, M. Rezapour, L. Raffaele, G. Mihaylov, O. Telve, P Ortega Jiménez.

#### DOCTORAL STUDENTS

He has been the **supervisor** of the following PhD students:

- Ottavia Telve (PhD in Pure and Applied Mathematics, Univ. and Pol. Torino)
- Saeed Zalzadeh (PhD in Mathematics, Pol. Torino)
- Patrizia Semeraro (PhD in Mathematics, Univ. Torino);
- Maria del Rosario Rodriguez Grinolo (PhD in Statistics and Operations Research, Univ. of Sevilla, Spain);
- Sergio Ortobelli (PhD in Computational Methods for Financial Decisions, Univ. Bergamo),
- Cristina Zucca (PhD in Computational Mathematics and Operations Research, Univ. Milano).
- Sonia Airaldi (PhD in Real Estate, Pol. Torino),

### OTHER SERVICE ACTIVITIES IN THE FIELD OF RESEARCH

- Associate Editor of the Journal "Mathematical Methods of Statistics" (2021 ...)
- Associate Editor of the "Journal of the Iranian Statistical Society" (2015 ...)

#### PUBLICATIONS

#### International Journals

[1] E. Fagiuoli and F. Pellerey. **New Partial Orderings and Applications**. *Naval Research Logistic* **40** (1993), 829–842.

[2] F. Pellerey. **Partial Orderings under Cumulative Shock Models**. *Advances in Applied Probability* **25** (1993), 939-946.

[3] F. Pellerey and M. Shaked. **Stochastic Comparison of Some Wear Processes**. *Probability in the Engineering and Informational Sciences* **7** (1993), 421–435.

[4] E. Fagiuoli and F. Pellerey. **Preservation of Certain Classes of Life Distributions under Poisson Shock Models**. *Journal of Applied Probability* **31** (1994), 458–465.

[5] F. Pellerey. **Shock Models with Underlying Counting Process**. *Journal of Applied Probability* **31** (1994), 156–166.

[6] E. Fagiuoli and F. Pellerey. **Mean Residual Life and Increasing Convex Comparison of Shock Models**. *Statistics and Probability Letters* **20** (1994), 337–345.

[7] N. Ebrahimi and F. Pellerey. **New Partial Ordering of Survival Functions Based on Notion of Uncertainties**. *Journal of Applied Probability* **32** (1995), 202–211.

[8] F. Pellerey. **On the Preservation of Some Orderings of Risk Under Convolution**. *Insurance: Mathematics and Economics* **16** (1995), 23–30.

[9] F. Pellerey and M. Shaked. Stochastic Comparison of Processes Generated by Random interruptions of Monotone Functions and Related Results. *Lifetime Data Analysis* **2** (1996), 91–112.

[10] F. Pellerey. **Some New Conditions for the Increasing Convex Comparison of Risks**. *Scandinavian Actuarial Journal* (1997), 38–47.

[11] E. Fagiuoli and F. Pellerey. **Moment Inequalities for Sums of DMRL Random Variables**. *Journal of Applied Probability* **34** (1997), 525–535.

[12] F. Pellerey and M. Shaked. Characterizations of the IFR and DFR Aging Notions by Means of the Dispersive Order. *Statistics and Probability Letters* **33** (1997), 389–393.

[13] F. Belzunce, F. Pellerey, J.M. Ruiz and M. Shaked. **The Dilation Order, the Dispersion Order, and Orderings of Residual Lives**. *Statistics and Probability Letters* **33** (1997), 263–275.

[14] A. Di Crescenzo and F. Pellerey. **On Lifetimes in Random Environments**. *Naval Research Logistic* **45** (1998), 365–375.

[15] F. Pellerey. Stochastic Comparison for Multivariate Shock Models. *Journal of Multivariate Analysis* **71** (1999), 42–55.

[16] E. Fagiuoli, F. Pellerey and M. Shaked. A Characterization of the Dilation Order and its Applications. *Statistical Papers* **40** (1999), 393–406.

[17] F. Pellerey, M. Shaked and J. Zinn. **Nonhomogeneous Poisson Processes and Logconcavity**. *Probability in the Engineering and Informational Sciences* **14** (2000), 353-375.

[18] F. Pellerey. Random Vectors with HNBUE{type Marginal Distributions. *Statistics and Probability Letters* **50** (2000), 265–271.

[19] F. Pellerey and P. Semeraro. **Aging and Stochastic Comparisons for a Covariate Failure Model**, *Journal of Applied Probability* **39** (2002), 421–425.

[20] A. Di Crescenzo and F. Pellerey. **On Prices' Evolutions based on Geometric Telegrapher's Process**, *Applied Stochastic Models in Business and Industry* **18** (2002), 171–184.

[21] F. Belzunce, R.E. Lillo, F. Pellerey and M. Shaked. **Preservation of Association in Multivariate Shock and Claim Models**, *Operations Research Letters* **30** (2002), 223–230.

[22] F. Pellerey and K. Petakos. On Closure Property of the NBUC Class Under Formation of Parallel Systems, *IEEE { Transactions on Reliability*, **51** (2002), 452–454.

[23] F. Belzunce, X. Gao, T. Hu and F. Pellerey. **Characterizations of the hazard rate order and IFR aging notion**, *Statistics and Probability Letters* **70** (2004), 235–242.

[24] F. Pellerey and C. Zucca. **Stochastic Bounds for the Sparre Andersen Process**, *Methodology in Computing and Applied Probability* **7** (2005), 225–247.

[25] I.A. Ahmad, M. Kayid and F. Pellerey. **Further Results Involving the MIT order and the IMIT class**, *Probability in the Engineering and Informational Sciences* **19** (2005), 377–395.

[26] F. Pellerey and P. Semeraro. A Note on the Portfolio Selection Problem, *Theory and Decision* **59** (2005), 295–306.

[27] F. Belzunce, E. Ortega, F. Pellerey and J.M. Ruiz. Variability of Total Claim Amounts under Dependence between Claims Severity and Number of Claims, *Insurance: Mathematics and Economics* **38** (2006), 460–468.

[28] F. Pellerey. Comparison Results for Branching Processes in Random Environments, *Journal of Applied Probability* **44** (2007), 142–150.

[29] F. Belzunce, E. Ortega, F. Pellerey and J.M. Ruiz. **On Ranking and Top Choice Orderings** for Random Utility Models with Dependent Utilities, *Metrika* 66 (2007), 197–212.

[30] S. Ortobelli and F. Pellerey. **Applications to Portfolio Theory of Market Stochastic Bounds**, (2007), *Investment Management and Financial Innovations* **4** (2007), 25–36.

[31] A. Astolfi and F. Pellerey. Subjective and Objective Assessment of Acoustically Overall Environment Quality in Secondary School Classrooms, *Journal of Acoustical Society of America* **123** (2008), 163–173.

[32] S. Ortobelli and F. Pellerey. **Market Stochastic Bounds with Elliptical Distributions**. *Journal of Concrete and Applicable Mathematics* **6** (2008), 293–314.

[33] J. M. Fernandez–Ponce, E. Ortega and F. Pellerey. **A note on bisexual Galton-Watson branching processes in random environments**, *Scientiae Mathematicae Japonicae* **67** (2008), 183–196.

[34] J. M. Fernandez–Ponce, E. Ortega and F. Pellerey. **Convex Comparisons for Random Sums in Random Environments and Applications**, *Probability in the Engineering and Informational Sciences* **22** (2008), 389–413.

[35] F. Pellerey. On Univariate and Bivariate Aging for Dependent Lifetimes with Archimedean Survival Copulas, *Kybernetika* 44 (2008), 795–806.

[36] J. Mulero, F. Pellerey and R. Rodriguez-Grinolo. **Stochastic Comparisons for Time Transformed Exponential Models**, *Insurance: Mathematics and Economics* **46** (2010), 328–333.

[37] J. Mulero, F. Pellerey and R. Rodriguez-Grinolo. **Negative aging and stochastic comparisons of residual lifetimes in multivariate frailty models**, *Journal of Statistical Planning and Inference* **140**, 6, (2010), 1594–1600.

[38] J. Mulero and F. Pellerey. **Bivariate Aging Properties under Archimedean Dependence Structures**, *Communications in Statistics - Theory and Methods* **39**, 17, (2010), 3108–3121.

[39] A. Di Crescenzo and F. Pellerey. **Improving series and parallel systems through mixtures** of duplicated dependent components, *Naval Research Logistic*, **58** (2011), 365–375.

[40] X. Li and F. Pellerey. Generalized Marshall-Olkin Distributions, and Related Bivariate Aging Properties, *Journal of Multivariate Analysis*, **102** (2011), 1399–1409.

[41] J. M. Fernandez–Ponce, F. Pellerey and R. Rodriguez-Grinolo. **On a new NBUE property in multivariate sense: An application**, *Computational Statistics & Data Analysis*, **55** (2011), 3283–3294.

[42] J. M. Fernandez–Ponce, F. Pellerey and R. Rodriguez-Grinolo. **A characterization of the multivariate excess wealth ordering**, *Insurance: Mathematics and Economics*, **49** (2011), 410–417.

[43] A. Di Crescenzo and F. Pellerey. Stochastic comparisons of series and parallel systems with randomized independent components, *Operations Research Letters*, **39** (2011), 380–384.

[44] H. Laniado, R.E. Lillo, F. Pellerey and J. Romo. **Portfolio selection through an extremality stochastic order**, *Insurance: Mathematics and Economics*, **51** (2012), 1-9.

[45] F. Pellerey, M. Shaked and S. Yasaei Sekeh. **Comparisons of Concordance in Additive Models**, *Statistics and Probability Letters*, **582** (2012), 2059-2067.

[46] M. Gasparini, F. Pellerey and M. Proietti. **Bayesian Hiherarchical Models to analyze customer satisfaction data for quality improvement: a case study**, *Applied Stochastic Models in Business and Industry*, **28** (2012), 571-584.

[47] M. Rezapour, M. H. Alamatsaz and F. Pellerey. **Multivariate Aging and Archimedean Dependence Structures in High Dimensions**, *Communications in Statistics - Theory and Methods*, **42** (2013), 2056-2070.

[48] Li X., Pellerey F. and You Y. **On Used Systems and Systems with Used Components**, in: Stochastic Orders in Reliability and Risk: In honor of Professor Moshe Shaked - Lecture notes in Statistics, vol 208, Li H. and Li X. eds, 2013. Springer, New York. pp 163-173.

[49] A. Di Crescenzo, E. Frostig and F. Pellerey. **Stochastic Comparisons of Symmetric Supermodular Functions of Heterogeneous Random Vectors**, *Journal of Applied Probability*, **50** (2013), 464-474.

[50] V.R.M. Lo Verso, A. Pellegrino and F. Pellerey. **A multivariate non-linear regression model** to predict the energy demand for lighting in rooms with different architectural features and lighting control systems, *Energy and Buildings*, **76** (2014), 151-163.

[51] F. Bellini, F. Pellerey, C. Sgarra, and S. Yasaei Sekeh. **Comparison results for GARCH processes**, *Journal of Applied Probability*, **51** (2014), 685-698.

[52] F. Pellerey and S. Zalzadeh. **On preservation of ageing under minimum for dependent random lifetimes**, *Hacettepe Journal of Mathematics and Statistics*, **43** (2014), 873-884.

[53] J. Navarro, F. Pellerey and A. Di Crescenzo. Orderings of coherent systems with randomized dependent components, *European Journal of Operational Research*, **240** (2015), 127-139.

[54] F. Pellerey and S. Zalzadeh. A note on relationships between some univariate stochastic orders and the corresponding joint stochastic orders, *Metrika*, **278** (2015), 399-414.

[55] E. Frostig and F. Pellerey. **General Marshall-Olkin Models, Dependence Orders and Comparisons of Environmental Processes**, in: *Marshall-Olkin Distributions - Advances in Theory and Applications - Springer Proceedings in Mathematics & Statistics*, Cherubini, U., Durante F. and Mulinacci S. eds, (2016), pp 51-64.

[56] F. Belzunce, C. Martinez-Riquelme, F. Pellerey and S. Zalzadeh. **Comparison of hazard** rates for dependent random variables, *Statistics*, **50** (2016), 630-648.

[57] J. M. Fernandez-Ponce, F. Pellerey and R. Rodriguez-Grinolo. **Some Stochastic Properties** of Conditionally Dependent Frailty Models, *Statistics*, **50** (2016), 649-666.

[58] S. Zalzadeh and F. Pellerey. **On componentwise unimodality of copulas**, *Statistics and Probability Letters*, **112** (2016), 51-57.

[59] J. M. Fernandez-Ponce, F. Pellerey and R. Rodriguez-Grinolo. **New Multivariate Aging Notions based on the Corrected Orthant and the Regression Representation**, *Communications in Statistics - Theory and Methods*, **45** (2016), 2958-2974.

[60] F. Pellerey and F. Spizzichino. Joint weak hazard rate order under non-symmetric copulas, *Dependence Modeling*, **4** (2016), 190-204.

[61] L. Raffaele, L. Bruno, F. Pellerey and L. Preziosi. **Windblown sand saltation: A statistical approach to fluid threshold shear velocity**, *Aeolian Research*, **23** (2016), 79-91.

[62] L. Raffaele, L. Bruno, D. Fransos and F. Pellerey. **Incoming windblown sand drift to civil infrastructures: a probabilistic evaluation**, *Journal of Wind Engineering and Industrial Aerodynamic*, **166** (2017), 36-47.

[63] J. Navarro, M. Longobardi and F. Pellerey. Comparison results for inactivity times of kout-of-n and general coherent systems with dependent components, *TEST*, **26** (2017), 822-846.

[64] G. Calosso, G.E. Puglisi, A. Astolfi, A. Castellana, A. Carullo and F. Pellerey. **A 1-school year longitudinal study of secondary school teachers voice parameters and the influence of classroom acoustics**, *Journal of Acoustical Society of America*, **142** (2017), 1055-1066.

[65] V.R.M. Lo Verso, G. Mihaylov, A. Pellegrino, and F. Pellerey. Estimation of the daylight amount and of the energy demand for lighting for the early design stages: definition of a set of mathematical models, *Energy and Buildings*, **155** (2017), 151-165.

[66] A. Di Crescenzo and F. Pellerey. **Some results and applications of geometric counting processes**, *Methodology and Computing in Applied Probability*, **21** (2019), 203-233.

[67] M. Longobardi and F. Pellerey. On the role of dependence in residual lifetimes, *Statistics and Probability Letters*, **153** (2019), 56-64.

[68] A. Astolfi, G.E. Puglisi, S. Murgia, G. Minelli, F. Pellerey, A. Prato and T. Sacco. Influence of Classroom Acoustics on Noise Disturbance and Well-Being for First Graders, *Frontiers in Psychology*, **10** (2019), Article 2736.

[69] J. Navarro, F. Pellerey and M.A. Sordo. Weak Dependence Notions and Their Mutual Relationships. *Mathematics*, **9** (2021), 81-105.

[70] F. Pellerey and J. Navarro. Stochastic monotonicity of dependent variables given their Sum. *TEST*, **31** (2022), 543-561.

[71] J. Navarro and F. Pellerey. **Preservation of ILR and IFR aging classes in sums of dependent random variables**, *Applied Stochastic Models in Business and Industry*, **38** (2022), 240-261.

[72] F. Buono, M. Longobardi and F. Pellerey. Varentropy of Past Lifetimes, *Mathematical Methods of Statistics*, **31** (2022), 57-73.

[73] J. Navarro, F. Pellerey and J. Mulero. **On sums of dependent random lifetimes under the time-transformed exponential model**, *TEST*, **31** (2022), 879-900.

[74] L. Valetti, F. Pellerey and A. Pellegrino. A Novel Approach for the Assessment of the Nocturnal Image of the Cultural Landscape, *LEUKOS* (2022), online first - https://doi.org/10.1080/15502724.2022.2057325

[75] S. Beltramino et al. Assessing territorial vulnerability. *TeMA - Journal of Land Use, Mobility and Environment*, **15** (2022), 355-375. https://doi.org/10.6093/1970-9870/9069

#### Extended abstracts and Proceedings of international conferences

[76] A. Di Crescenzo e F. Pellerey. **Stochastic Comparison of Wear Processes Characterized by Random Linear Wear Rates**, *Abstracts' Book of the Second International Conference on Mathematical Methods in Reliability* (Bordeaux, July 4-7, 2000), 339-342.

[77] A. Di Crescenzo e F. Pellerey. **Convex Ordering of Integrated Telegrapher's Processes**, *Abstracts' Book of the Third International Conference on Mathematical Methods in Reliability*(Trondheim, June 17-21, 2002), 197-200.

[78] C. Aghemo, V.R.M. Lo Verso, A. Pellegrino and F. Pellerey. **Prediction of energy demand for lighting in buildings with different architectural features**, *Conference on Building Energy and Environment COBEE2012* (Boulder, Colorado, USA, August 1-4, 2012), pp. 152-159.

[79] A. Astolfi, F. La Malva, P. Bottalico and F. Pellerey. **Soundscape characterization in selected areas of Turin to differentiate between pleasant and unpleasant urban areas**, *In: Euronoise 2012, Ninth European Conference on Noise Control,* (Prague (CZ), 10-13 June 2012), pp. 1386-1391

[80] R. Pollo, A. Levra Levron and F. Pellerey. **Design Tools for Life Cycle Analysis and Durability Evaluation of Building Systems: A Research on the Building Envelope**, *In: Sustainable Building 2013 - Realising Sustainability in the Tropics*, (Marina Bay Sands, Singapore, 9-10 September 2013), pp. 53-58.

[81] A. Bellazzi, G. Jacazio, B. Maino, G. Mihaylov, F. Pellerey and M. Sorli. Integrated Multivariate Health Monitoring System for Helicopters Main Rotor Drives: Development and Validation with In-Service Data., *In: Annual Conference of the Prognostic and Healt Menagement Society 2014*, , (Fort Worth, TX, USA, October 2014.), pp. 430-441.

[82] G. Jacazio, G. Mihaylov and F. Pellerey. **Multivariate Processing of Accelerometric Condition Indicators.**, *9th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2015*, (Paris, FR, 2-4 September 2015), pp. 571-576.

[83] Ortega-Jiménez, P., Pellerey, F., Sordo, M.A. and Suárez-Llorens, A. (2023). **Note on Efron's Monotonicity Property Under Given Copula Structures**. In: García-Escudero Luis *et al., Building Bridges between Soft and Statistical Methodologies for Data Science*. SMPS 2022. Advances in Intelligent Systems and Computing, vol 1433. Springer, Cham. https://doi.org/10.1007/978-3-031-15509-3\_40

[84] Ortega-Jiménez, P., Pellerey, F., Sordo, M.A. and Suárez-Llorens, A. (2023). A Minimizing Problem of Distances Between Random Variables with Proportional Reversed Hazard Rate Functions. In: García-Escudero Luis *et al., Building Bridges between Soft and Statistical Methodologies for Data Science*. SMPS 2022. Advances in Intelligent Systems and Computing, vol 1433. Springer, Cham. https://doi.org/10.1007/978-3-031-15509-3\_41

#### National Journals

[85] M. Carletti and F. Pellerey. **A New Necessary Condition for Higher Orders Stochastic Dominances, with Applications**. *Ricerche di Matematica* 47, (1998), 373-381.

[86] R. Curto, S. Airaldi, C. Coscia, E. Fregonara and F. Pellerey. Le Microzone Catastali a Torino, *Urbanistica e Informazioni*, 166 (1999), 8-9.

[87] F. Pellerey, M.B.L. Rocchi and F. Solimano. A Discrete Model in Population Genetics: The Fragile–X Syndrome, *Statistica*, **61**(1) (2001), 143-153.

[88] R.E. Lillo, F. Pellerey, P. Semeraro and M. Shaked. On the Preservation of the Supermodular Order under Multivariate Claim Models, *Ricerche di Matematica*, **52**, (2003), 73-81.

[89] E. Frostig and F. Pellerey. **Supermodular comparison of dependence models and multivariate processes, with applications**, Lecture Notes of *Seminario Interdisciplinare di Matematica*, **12**, (2015), 125-138.

[90] G. Brunetta, O. Caldarice and F. Pellerey. La Valutazione Integrata Territoriale. Scenari del commercio in Provincia di Trento, *SR Scienze Regionali*, **16** (2017), 401-432.

#### Other publications

[91] F. Pellerey. Elementi di Statistica per le Applicazioni, (1998). Undergraduate monograph.

[92] F. Pellerey, R. Fontana, D. Bonino and F.R. Crucinio. **Elementi di Statistica per l'Ingegneria e l'Architettura - Teoria ed esercizi svolti**, (2017). Esculapio Editore, Bologna. ISBN: 9788893850254. Undergraduate monograph.