

CURRICULUM VITAE: Luisa SCACCIA

Personal info:

Born in Rome, October 02 1973, Nationality Italian

Current position:

Associate professor in Statistics, University of Macerata, Italy

Education:

- BA in Economic Statistics, University of Rome "La Sapienza", 1997
- Master in Statistics, School of Mathematics and Statistics, University of Sheffield, UK, 1999
- PhD in Statistical and Mathematical Methods for Economic and Social Research, University of Perugia, Italy, 2001

Research and Academic Activity:

- University of Macerata, Italy, 2005-present
- Visiting Researcher, Institute Laue Langevin, Grenoble, France, 2012-present
- Visiting Professor of Statistics, Pôle technologique de l'IUT de Valence - Université Pierre Mendès France, Mar.-Apr. 2009
- Research Associate, University of Perugia, Italy, 2001-2004
- Teaching Statistics in University of Urbino "Carlo Bo", Italy, 2002-2004
- Research Associate, University of Bristol, UK, 2000-2001
- Visiting Student, University of Sheffield, UK, 1998-2000.
- Visiting Student, University of Dar es Salaam, Tanzania, Nov. 1996-Gen. 1997.
- Visiting student. University of Southampton, UK, 1995-1996

Grants and National and Foreign Research Activities:

- [2011] PRIN-MURST, "Cambiamento strutturale e Crescita", National Coordinator: Prof. Neri Salvatori (Univ. Pisa).
- [2005] PRIN-MIUR "Modelli marginali per variabili categoriche con applicazioni all'analisi causale". National Coordinator: Prof. Guido Consonni (Univ. Pavia).
- [2002] PRIN-MIUR "Metodi statistici per ordinamenti stocastici con applicazioni sociosanitarie ed ambientali". National Coordinator: Prof. Antonio Forcina (Univ. Perugia).

Non Academic Research and Consultancy Activities:

Research consultant on "Hospital waste management assessment in China: guidelines for a methodological approach" (Consorzio Gaia), project founded by Ministero italiano per l'ambiente e il territorio, 2005, Rome – Italy.

Served as a referee for:

Statistica Sinica, Computational Statistics, Computational Statistics and Data Analysis, Brazilian Journal of Probability and Statistics, Statistical Methods and Applications.

Current research topics:

Mixture models; Markov chains Monte Carlo methods; Discrete model choice; Spatial models.

SELECTED PUBLICATIONS

1. Coppier, R., Michetti, E., Scaccia, L. (2021). Industrial structure and evasion dynamics, is there any link?. *METROECONOMICA*, vol. In press, p. 1-27.
2. De Francesco, A., Bafile, U., Cunsolo, A., Scaccia, L., Guarini, E. (2021). Searching for a second excitation in the inelastic neutron scattering spectrum of a liquid metal: a Bayesian analysis. *SCIENTIFIC REPORTS*, **11**, p. 13974-13982.
3. De Francesco, A., Scaccia, L., Formisano F., Guarini E., Bafile U., Maccarini M., Zhang, Y., Nykypanchuk, D., Alatas, A., Cunsolo, A. (2021). The damping of terahertz acoustic modes in aqueous nanoparticle suspensions. *SCIENTIFIC REPORTS*, **11**, p. 20110-20119.
4. De Francesco, A., Scaccia, L., Formisano F., Guarini E., Bafile U., Maccarini M., Alatas, A., Cai Y. Q., Cunsolo, A. (2020). The terahertz dynamics of an aqueous nanoparticle suspension: An inelastic x-ray scattering study. *NANOMATERIALS*, **10**, p. 860-872.
5. De Francesco, A., Scaccia, L., Formisano, F., Maccarini, M., De Luca, F., Parmentier, A., Alatas, A., Suvorov, A., Cai, Yong Q., Li, R., Cunsolo, A. (2020). Shaping the terahertz sound propagation in water under highly directional confinement. *PHYSICAL REVIEW. B*, **101**, p. 543061-543069.
6. De Francesco, A., Scaccia, L., Formisano F., Guarini E., Bafile U., Maccarini M., Alatas, A., Cai Y. Q., Nykypanchuk D., Cunsolo, A. (2020). Onset of interfacial waves in the terahertz spectrum of a nanoparticle suspension. *PHYSICAL REVIEW. E*, **102**, p. 0226011-0226016.
7. De Francesco, A., Scaccia, L., Maccarini, M., Formisano, F., Guarini, E., Bafile, U., Cunsolo, A. (2019). Interpreting the Terahertz Spectrum of Complex Materials: The Unique Contribution of the Bayesian Analysis. *MATERIALS*, **12**, p. 2914-2929.
8. De Francesco, A., Scaccia, L., Lennox R. B., Guarini E., Bafile U., Falus P., Maccarini M. (2019). Model-free description of polymer-coated gold nanoparticle dynamics in aqueous solutions obtained by Bayesian analysis of neutron spin echo data. *PHYSICAL REVIEW. E*, **99**, p. 052504-052521.
9. Parmentier, A., Maccarini, M., De Francesco, A., Scaccia, L., Rogati, G., Czakkel, O., De Luca, F. (2019). Neutron spin echo monitoring of segmental-like diffusion of water confined in the cores of carbon nanotubes. *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, **21**, p. 21456-21463.
10. Scianna, C., Niccolini, F., Giakoumia, S., Di Franco, A., Gaines, S. D., Bianchi, C. N., Scaccia, L., Bava, S., Cappanera, V., Charbonnel, E., Culioli, J. M., Di Carlo, G., De Franco, F., Dimitriadis, C., Panzalis, P., Santoro, P., Guidetti, P. (2019). Organization Science improves management effectiveness of Marine Protected Areas. *JOURNAL OF ENVIRONMENTAL MANAGEMENT*, **240**, p. 285-292.
11. Rossi, G., Scaccia, L., Busonero, G., Capocchetti, F., Camarda, M., Bartolozzi, C., D'Avenia, P., Dente, A. M., Di Nicola, E., Gasparrini, N., Fattori, S. (2018). Address the dosimetry in radiometabolic therapy; relationship between dosimetric value and clinical parameters in differentiated thyroid cancer. *Physica Medica*, **56**, p. 124-125.
12. De Francesco, A., Scaccia, L., Maccarini, M., Formisano, F., Zhang, Y., Gang, O., Nykypanchuk, D., Said, A. H., Leu, B. M., Alatas, A., Cai, Y. Q., Cunsolo, A. (2018). Damping off Terahertz Sound Modes of a Liquid Upon Immersion of Nanoparticles. *ACS NANO*, **12**, p. 8867-8874.
13. Gatta, V., Marcucci, E., Le Pira, M., Scaccia, L., Delle Site, P. (2018). Willingness to Pay Measures to Tailor Policies and Foster Stakeholder Acceptability in Urban Freight Transport. *Scienze Regionali*, **3**, p. 351-370.

14. Bartolucci, F., Farcomeni, A. and Scaccia, L. (2017). A Nonparametric Multidimensional Latent Class IRT Model in a Bayesian Framework. *Psychometrika*, **82**, p. 952-978.
15. De Francesco A., Guarini E., Bafile U., Formisano F., Scaccia L. (2016). Bayesian approach to the analysis of neutron Brillouin scattering data on liquid metals, *Physical review E*, **94**, p. 023305-1-023305-14
16. Gatta, V., Marcucci, E. and Scaccia, L. (2015) On finite sample performance of confidence intervals methods for willingness to pay measures, *Transportation Research A*, **82**, p. 169-192
17. Marcucci, E., Gatta, V. and Scaccia, L. (2015) Urban freight, parking and pricing policies: an evaluation from a transport providers' perspective, *Transportation Research A*, **74**, p. 239-249
18. Castellano, R. and Scaccia, L. (2014). Can CDS indexes signal future turmoils in the stock market? A Markov switching perspective, *Central European Journal of Operations Research*, New York, Springer-Verlag, **22**, p. 285 – 305.
19. Bartolucci, F., Scaccia, L. and Farcomeni, A. (2012). Bayesian inference through encompassing priors and importance sampling for a class of marginal models for categorical data. *Computational Statistics and Data Analysis*, **56**, p. 4067-4080.
20. Castellano, R., Scaccia, L. (2012). CDS and Rating Announcements: changing signaling during the crisis? *Review of Managerial Science*, **6**, p. 239-264.
21. Scaccia L., Martin R.J (2011). Model-based tests for simplification of lattice processes. *Journal of Statistical Computation and Simulation*, **81**, p. 89-107.
22. Scaccia L. (2009). Random parameters logit models applied to public transport demand. *Global & Local Economic Review*, **13**, p. 147-166.
23. Bartolucci, F., Scaccia, L. and Mira, A. (2006). Efficient Bayes factor estimation from the Reversible jump output, *Biometrika*, **93**, p. 41-52.
24. Bartolucci, F. and Scaccia, L. (2005). The use of mixtures for dealing with non-normal regression errors, *Computational Statistics and Data Analysis*, **48**, p. 821-834.
25. Scaccia, L. and Martin, R.J. (2005). Testing axial symmetry and separability of lattice processes, *Journal of Statistical Planning and Inference*, **131**, p. 19-39.
26. Bartolucci, F. and Scaccia, L. (2004) Testing for positive association in contingency tables with fixed margins, *Computational Statistics and Data Analysis*, **47**, p. 195-210.
27. Marcucci, E. and Scaccia, L. (2004). Mode choice models with attribute cutoffs analysis: the case of freight transport in the Marche region, *European Transport/Trasporti Europei*, **25/26**, p.21-32.
28. Scaccia, L. and Green, P.J. (2003). Bayesian growth curves using normal mixtures with nonparametric weights, *Journal of Computational and Graphical Statistics* **12**, p. 308-331.