CV: LORENZO TONIAZZI

PERSONAL INFORMATION

Born	1990, Italy
Citizenship	Italian
Email	lt2739@columbia.edu
Address	500 W 120th street, New York, NY, 10027,
	Columbia University,
	Applied Physics and Applied Math

CURRENT POSITION

Columbia University, NY - Postdoctoral Research Scientist
2019

EDUCATION

University of Warwick, UK - Ph.D. in Interdisciplinary Mathematics
2015-2018

University of Warwick, UK - M.Sc. + Diploma in Mathematics
2013-2015

University of Warwick, UK - M.Sc. in Economics
2012-2013

UCSC di Milano, Italy - B.Sc. in Economics
2019-2012

PUBLICATIONS/PREPRINTS

[1] M. E. Herández-Hernández, V. N. Kolokoltsov, L. Toniazzi. *Generalised fractional evolution equations of Caputo type*. Chaos, Solitons & Fractals, Elsevier 102 (2017): 184-196. arXiv:1706.00319.

[2] L. Toniazzi. (2019) *Stochastic classical solutions for space-time fractional evolution equations on a bounded domain*. J Math Anal App, **469**(2):594-622. arXiv:1805.02464.

[3] Q. Du, L. Toniazzi, Z. Zhou. *Stochastic solutions for time-nonlocal evolution equations*. Submitted: Oct. 2018. arXiv:1810.08788

ARTICLES IN PREPARATION

[4] V. N. Kolokoltsov, L. Toniazzi. *A Probabilistic generalisation of Caputo derivatives of order $\beta \in (1,2)$*. Expected submission date: 2019.

[5] Q. Du, L. Toniazzi, Z. Zhou. *Asymptotically compatible Monte Carlo schemes for time-nonlocal evolution equations*. Expected submission date: 2019.

[6] L. Toniazzi. *Asymmetric nonlocal Markovian generators and boundary value problems*. Expected submission date: 2019.

[7] L. Toniazzi. *Heat kernel estimates for time-fractional Cauchy problems with non-local initial conditions*. Expected submission date: 2019.

[8] L. Toniazzi. *Overshoting space-time coupled fractional governing equations*. Expected submission date: 2019.

TALKS AT CONFERENCES

Sep. 2016: Michigan State University, USA - A Workshop on Future Directions in Fractional Calculus Research and Applications. Website.

Jun. 2017: IIT, Chicago, USA - Nonlocal Dynamics: Theory, Computation and Applications. Website.

Sep. 2018: Bielefeld University, Germany - 9th International Conference on Stochastic Analysis and Its Applications. Website.

Sep. 2018: Swansea University, UK - Probability and NonLocal PDEs: Interplay and Cross-Impact. Website.

Sep. 2018: BCAM, Spain - 6th Fractional Calculus, Probability and Nonlocal Operators Conference. Website.

Oct. 2018: Politecnico di Milano, Italy - Analysis Seminar. Invited. Website.

TEACHING

Teaching Assistant at the University of Warwick for the courses:

ANALYSIS III (2015) - METRIC SPACES (2016) - MARKOV PROCESSES AND PERCOLATION THEORY (2017) - MEASURE THEORY (2017).

Several supervision classes for first/second year mathematics undergraduate students.

REFEREEING

Communications in Nonlinear Science and Numerical Simulation (since 2016), Complexity (since 2017), Arab Journal of Mathematical Sciences (since 2018).

OTHER INFORMATION

Grants	EPSRC UK grant (2015-2019) - Sir Richard Stapley Educational Trust grant (2014-2015) - Erasmus scholarship (2012).
Phd Advisors	Prof. Vassili N. KOLOKOLTSOV, Dr. Xue-Mei Li & Dr. Roger TRIBE
Languages	Italian (native), English (fluent), Spanish, French (basic).
Programming	Python, R, MATLAB, Stata, Mathematica.
General research interests	Fractional and nonlocal PDEs, jump-type stochastic processes, random walks in random environments, general equilibrium models. Also interested in the numerics/applications side.

January 3, 2019