

Curriculum Vitae

INFORMAZIONI PERSONALI

Nome GIULIO
Cognome COTTONE
Recapiti DICAM, Edificio 8, Viale delle Scienze, 90128
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FORMAZIONE TITOLI

- since 2015: Ricercatore at DICAM, Università degli Studi di Palermo
- 2015-2017: Researcher Fellow and External Lecturer at the Engineering Risk Analysis Group, Technische Universität München
- 2011-2015: Research Assistant (Post-Doc) at the Engineering Risk Analysis Group, Technische Universität München
- 2009-2011: Guest Scientist at the Engineering Risk Analysis Group, Technische Universität München
- 2007-2011: Post-Doc Università degli Studi di Palermo, Italy. Dipartimento di Ingegneria Strutturale, Aerospaziale e Geotecnica.
- 2005-2006: Visiting Student, Cornell University, USA. School of Civil and Environmental Engineering.
- 2004-2006: Ph.D. Degree, Università degli Studi di Palermo.

ATTIVITA' DIDATTICA

- 2010 - 2017. Titolare del Corso Computational Methods in Stochastic Dynamics at the **Technische Universität München**
- 2012 - 2017. Titolare del Corso Introduction to Random Vibration at the **Technische Universität München**
- 2015 - 2016. Assistenza ai Corsi di Statica e Scienza delle Costruzioni, **Università degli Studi di Palermo**
- 2016 - 2017. Titolare del corso di Statica, **Polo Didattico Agrigento, Università degli Studi di Palermo**

ASSOCIAZIONI SCIENTIFICHE

Member of the GAMM activity group on Uncertainty Modelling.

PUBBLICAZIONI

Recent Publications

Cottone, G.; Santoro, R. (2017)
Fractional Calculus in Interval Analysis
ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems Part B: Volume: 3 Issue 3.

Cottone, G.; Scimemi, G. Fileccia; Pirrotta, A., (2014)
alpha-stable distributions for better performance of ACO in detecting damage on not well spaced frequency systems.
Probabilistic Engineering Mechanics Volume: 35 Pages: 29-36.

Cottone, G.; Gollwitzer, S.; Heckenberger, U.; et al., (2013)

Reliability-Oriented Optimization of Replacement Strategies for Monitored Composite Panels for Aircraft Structures. Structural Health Monitoring, Vols 1 and 2 Pages: 2728-2735.

Runtemund, Katrin; Cottone, Giulio; Mueller, Gerhard, (2013)
Treatment of arbitrarily autocorrelated load functions in the scope of parameter identification.
Computers & Structures Volume: 126 Pages: 29-40.

Cottone G. (2011)
Statistics of Non-Linear Stochastic Dynamical Systems by under Lévy noises by a convolution quadrature approach.
Journal of Physics A: Math. Theor. **44** 185001, doi:10.1088/1751-8113/44/18/185001.

Barone G., Cottone G., Di Paola M., Tamura Y. (2011)
Wind loads spectrum generation by the 'H-fractional spectral moments' decomposition
13th International Conference on Wind Engineering, July 10-15, 2011 Amsterdam, The Netherlands.

Cottone G. Fileccia G., Pirrotta A. (2011)
Damage identification by a modified Ant Colony Optimization for not well spaced frequency systems.
Proceedings of the 8th International Conference on Structural Dynamics, EURO-DYN 2011 (eds. G. De Roeck, G. Degrande, G. Lombaert, G. Müller). Leuven, Belgium, 4-6 July 2011. ISBN 978-90-760-1931-4

Cottone G., Di Paola M. (2011)
Fractional Spectral Moments for Digital Simulation of Multivariate Wind Velocity Fields.
International Journal of Wind Engineering & Industrial Aerodynamics **99**(6-7) 741-747. Elsevier, doi:10.1016/j.jweia.2011.03.006.

Cottone G., Di Paola M., Butera S. (2011)
Stochastic Dynamics of Nonlinear Systems with Fractional Power-Law Nonlinear Term. Fractional Calculus Approach.
Probabilistic Engineering Mechanics **26**(1) 101-108. Elsevier, doi: 10.1016/j.probengmech.2010.06.010.

More publications at ResearcherID or Orcid links below.

www.researcherid.com/rid/B-3565-2009

AMBITI DI RICERCA

- Non-linear structural vibrations
- Structural damage and parameter identification
- Structural Reliability, maintenance and inspection planning
- Non-local elasticity
- Stochastic hazards simulation
- Fractional calculus based mechanical model