

TEXAS SOUTHERN UNIVERSITY
COLLEGE OF SCIENCE AND TECHNOLOGY

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EDUCATION

1986	Università degli studi di Milano	Physics	Laurea, Milano, Italy
1992	M.S.	Physics	University of Pittsburgh
1996	Ph.D.	Physics	University of Pittsburgh

COURSES TAUGHT

PHYS 101 Principles of Physical Science
PHYS 237 College Physics I
PHYS 238 College Physics II

RESEARCH INTERESTS

Quantum Chaos. Computational and Mathematical Physics as applied to inverse problems for quantum operators, noise reduction for gravitational wave detection, etc.

PUBLICATIONS (five most recent peer-reviewed)

- [1] D. Bessis and L. Perotti "Universal analytic properties of noise: introducing the J-matrix formalism"; J. Phys. A 42 (2009) 365202 (15pp)
- [2] L. C. Perotti, "Ionization of Rydberg alkali-metal atoms in quasistatic electric fields: A classical view of the n^{-5} scaling of the threshold field"; Phys. Rev. A 73, 053405 (2006).

- [3] L. C. Perotti, "Proposed Interpretation of Microwave Ionization of Rydberg Alkali-metal Atoms"; *Phys. Rev. A* 71, 033405 (2005)
- [4] L. C. Perotti, "Quantum double pendulum: Study of an autonomous classically chaotic quantum system"; *Phys. Rev. E* 70, 066218 (2004).
- [5] Luca Perotti and Daniel Bessis, "Realistic Semiconductor Heterostructures design using Inverse Scattering"; *Microelectronics Journal* 34 (2003)