TEXAS SOUTHERN UNIVERSITY

COLLEGE OF SCIENCE AND TECHNOLOGY

Name: **Daniel Bessis**

Department: **Physics**

Rank: **Professor**

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EDUCATION

1957   Engineer of "Ecole Nationale Superieure de l'Aeronautique", Paris

1961   M.A.   Theoretical Physics,   Orsay University, France

1965   Ph.D.   Theoretical Physics,   Sorbonne Paris (France)

COURSES TAUGHT

PHYS 101   Principles of Physical Science

PHYS 237   College Physics I

PHYS 238   College Physics II

PHYS 248   Mathematical Methods II

PHYS 272   Mechanics I

PHYS 333   Electricity and Magnetism I

RESEARCH INTERESTS

Mathematical Physics. Quantum Operators. Moment Problems with applications to physics and mathematics. Fractal analysis. Nonlinear systems. Inverse problems in quantum physics.

PUBLICATIONS (five most recent peer-reviewed)

1. D. Vrincenau., A. Z. Mseazne, D. Bessi, A. Temkin, "Exchange forces in dispersion relations investigated using Circuit Relations" Physical Review Letter 86, 3256-3259 (2001)

2. A. Cabo, C. R. Handy, D. Bessis, "On the uniqueness of the surface sources of evoked potentials" Physical Review E 64, 041901 (October 2001).

3. Msezane A.Z., Felfli Z., Bessis D., "Angle-optimized energy-variable method for electron differential cross-section measurements" Physical Review A Volume 65, 050701(R) Rapid Communications, 2002

4. L. Perotti and D. Bessis, Realistic semiconductor heterostructures design using inverse scattering Microelectronics Journal, 34, 1037-1041, (2003)

5. D. Bessis and L. Perotti, " Universal analytic properties of noise: introducing the J-matrix formalism", J. Phys. A: Math. Theor. 42, No. 36, 365202 (2009).