

PAUL E. SHANLEY

ASSOCIATE PROFESSOR OF PHYSICS

**AT NOIRE DAME
SINCE 1968**

BORN July 20, 1938
Massachusetts

AT: Boston,

Education

Northeastern University, B.S. 1960
Northeastern University, M.S. 1962
Northeastern University, Ph.D. 1966

Invited Talks

“Separatrix Crossing, Level Crossing, and Quantum Chaos,” Institute of Nuclear Physics,
University of Lisbon, Portugal, December 22 and 23, 1988.

Honors

List of Scientific Publications

“The Crystal Structure of the High Temperature Form of Choline Chloride,” R.L. Collin and P.E. Shanley, *Acta Cryst.* 14, 79 (1961).

“The Change in Radiation Sensitivity of Choline Chloride at the Phase Transition,” R.L. Collin and P.E. Shanley, *Radiation Research* 16, 674 (1962).

“Calculations of Deuteron Stripping in a Soluble Model,” R. Aaron and P.E. Shanley, *Phys. Rev.* 142, 608 (1966).

“Three-Body Approach to Direct Nuclear Reactions,” R. Aaron and P.E. Shanley, *Ann. Phys. (N.Y.)* 44, 363 (1967).

“Three-Body Approach to the Deuteron-Alpha System,” P.E. Shanley, presented at the Texas A & M Conference on Three-Particle Scattering, April, 1968 (W.A. Benjamin, Inc.).

“Three-Body Calculation of Deuteron-Alpha Scattering and Polarization,” Paul E. Shanley, *Phys. Rev. Lett.* 21, 627 (1968).

“Three-Body Model of Li^6 and Deuteron-Alpha-Particle Scattering,” Paul E. Shanley, *Phys. Rev.* 187, 1328 (1969).

“Possible Scheme for Analyzing Direct Nuclear Reactions,” Paul E. Shanley, *Phys. Rev. Lett.* 24, 13 (1970).

“Inelastic Effects in Approximate Three-Body Amplitudes,” Paul E. Shanley, *Phys. Rev.* C6, 145 (1972).

“Description of Nuclear Resonances with Mixed Isospin,” Paul E. Shanley, *Phys. Rev. Lett.* 34, 218 (1975).

“Extraction of Resonance Parameters from Nuclear Scattering Data,” M.V. Ahmed and P.E. Shanley, *Phys. Lett.* 36, 25 (1976).

“Unitary Four-Body Model,” A.C. Fonseca and P.E. Shanley, *Phys. Rev.* D13, 2255-2265 (1976).

“Four-Body Model of Two-Nucleon Transfer Reactions,” A.C. Fonseca and P.E. Shanley, *Phys. Rev. Lett.* 37, 1603 (1976).

“Soluble Model Involving Four Identical Particles,” A.C. Fonseca and P.E. Shanley, *Phys. Rev.* C14, 1343 (1976).

“Efimov Effect in an Analytically Solvable Model,” A.C. Fonseca, E.F. Redish, and P.E. Shanley, *Nuclear Physics* A320, 273-288 (1979).

“Model Three-Body Problem in the Molecular Mass Limit,” A.C. Fonseca and P.E. Shanley, *Annals of Physics* 117, 268-291 (1979).

“Level Parameters of the Isospin-Mixed 2^+ Doublet in ^8Be ,” M.U. Ahmed and P.E. Shanley, *Nuclear Physics* A332, 289-296 (1979).

“Electromagnetic Perturbation of Isobaric Multiplet Widths,” A.M. Awin and P.E. Shanley, *Nuclear Physics* A386, 101-124 (1982).

“A Three-Body Scattering Problem in the Molecular Mass Limit,” A.C. Fonseca and P.E. Shanley, *Nuclear Physics* A382, 97-114 (1982).

“Spectral Singularities of the Quartic Anharmonic Oscillator,” P.E. Shanley, *Physics Letters* A117, 161-165 (1986).

“Spectral Properties of the Scaled Quartic Anharmonic Oscillator,” P.E. Shanley, *Annals of Physics* 186, 292-324 (1988).

“Nodal Properties of the Scaled Quartic Anharmonic Oscillator,” P.E. Shanley, *Annals of Physics* 186, 325-354 (1988).

“Double Wells, Inverted Wells, and Level Crossing,” P.E. Shanley, *Physics Letters* A141, 7, 331-334 (1989).

“Diabolical Points and Their Relation to Level Crossing,” P.E. Shanley, *Physics Letters* A150, 55-58 (1990).