

CURRICULUM VITAE

Carl M. Shakin

Date of Birth: February 17, 1934Education:

B.S.	New York University College of Engineering	1955
M.A.	Harvard University	1957
Ph.D.	Harvard University	1961

Professional Experience:

Fulbright Fellow	University of Manchester Manchester, England	1955-56
NSF Predoctoral Fellow	Harvard University	1956-60
Instructor	Massachusetts Institute of Technology	1960-63
NSF Postdoctoral Fellow	Niels Bohr Institute, Copenhagen, Denmark	1963-64
NSF Postdoctoral Fellow	Institute for Theoretical Physics Oxford University	1964-65
Assistant Professor	Massachusetts Institute of Technology	1965-67
Associate Professor	Massachusetts Institute of Technology	1967-70
Associate Professor	Case Western Reserve University	1970-73
Visiting Associate Professor	Brown University	Spring, 1972
Professor	Brooklyn College of CUNY	1973-86
Distinguished Professor	Brooklyn College of CUNY	1986-present
Editorial Board	Physical Review C	1978-1980
Fellow	American Physical Society	1972-present
Senior Referee	Physical Review Letters	1980-1981

PUBLICATIONS

I. Journal Publications

1. Energy Bands in ZnS, Phys. Rev. 109, 818 (1956) - (with J. Birman).
2. Vibrations of Spherical Nuclei, Phys. Lett. 1, 151 (1962) - (with A.K. Kerman).
3. Direct and Compound Nucleus Effects in Nuclear Photodisintegration, Ann. Phys. (N.Y.) 22, 54 (1963).
4. On Model Calculations of Neutron Widths and Strength Functions, Ann. Phys. (N.Y.) 22, 373 (1963).
5. Resonance Reactions and Nuclear Shell Model, Ann. Phys. (N.Y.) 27, 13 (1964) - (with R.H. Lemmer).
6. Some Aspects of Short-Range Correlations in Nuclei, Ann. Phys. (N.Y.) 30, 95 (1964) - (with J. Da Providencia).
7. Determination of the Correlation Structure of Nuclei via Inelastic Electron Scattering, Nucl. Phys. 65, 54 (1965) - (with J. Da Providencia).
8. Random-Phase Approximation for Systems with Singular Interactions, Nucl. Phys. 65, 75 (1965) - (with J. Da Providencia).
9. Effective Interactions in Finite Nuclei, Phys. Lett. 19, 506 (1965)-(with M. H. Hull, Jr.).
10. Foundations for Hartree-Fock Calculations with Singular Potentials, Phys. Rev. Lett. 16, 403 (1966)-(with Y.R. Waghmare).
11. Generalized Hartree-Fock Calculations with an Effective Interaction for Finite Nuclei, Phys. Lett. 21, 209 (1966) - (with J. Svenne and Y.R. Waghmare).
12. Realistic Potentials and the Shell Model I, Phys. Rev. 149, 772 (1966) - (with J. Svenne and Y.R. Waghmare).
13. Unitary-Model-Operator Approach to Nuclear Structure Physics I, Phys. Rev. 161, 1006 (1967)-(with Y.R. Waghmare and M.H. Hull, Jr.).
14. Unitary-Model-Operator Approach to Nuclear-Structure Physics II - Applications, Phys. Rev. 161, 1015 (1967)-(with Y.R. Waghmare, M. Tomaselli and M.H. Hull, Jr.).
15. Corrections to Electromagnetic Transition Rates Due to Ground-State Correlations, Nucl. Phys. A108, 609 (1968) - (with J. Da Providencia).
16. The Shell-Model in the Continuum: Application to the Four-Nucleon Systems, Phys. Rev. 175, 1350 (1968) - (with J. Hufner).

17. An Analysis of the Lane Equations for Isobaric Analog Resonances, Ann. Phys. (N.Y.) 52, 486 (1969)-(with J. Hufner).
18. The Spurious States Problem and an Extension of the RPA, Portugal, Phys. Vol. 5, facs. 1/2, 31 (1968)-(with J. Da Providencia).
19. Coulomb Energies and the Excess Neutron Distribution from the Study of Isobaric Analog Resonances, Phys. Rev. Lett. 23, 484 (1969)-(with N. Auerbach, J. Hufner and A.K. Kerman).
20. Rearrangement Effects and Parameterization of the Effective Field in Nuclei, Phys. Rev. Lett. 23, 1302 (1969) - (with H. Meldner).
21. Single-Particle Resonances in the Unified Theory of Nuclear Reactions, Phys. Lett. 32B, 421 (1970) - (with W. Wang).
22. Threshold Photodisintegration of Pb^{208} , Phys. Rev. C2, 1809 (1970) - (with M.S. Weiss).
23. Off-Shell Continuations of the Two-Particle Transition Matrix with Bound-States, Phys. Rev. C3, 1146 (1971) - (with K.L. Kowalski, J.E. Monahan and R.M. Thaler).
24. Intermediate Structure and the Giant-Dipole Resonance in O^{16} , Phys. Rev. Lett. 26, 902 (1971) - (with W. Wang).
25. Elastically Equivalent Potentials, Phys. Rev. C4, 43 (1971)-(with J.E. Monahan and R.M. Thaler).
26. On Cluster Expansions for Correlated Wave Functions in Nuclear Physics, Phys. Rev. C4, 684 (1971).
27. Equivalent Two-Body Interactions with Specified Bound-State Wave Functions, Phys. Rev. Lett. 27, 518 (1971) - (with J.E. Monahan and R.M. Thaler).
28. A Theorem for Energy-Weighted Averages of Spectroscopic Factors, Phys. Rev. Lett. 27, 1069 (1971) -(with J. Da Providencia).
29. On Cluster Expansions for Correlated Wave Functions of Finite Systems, Phys. Rev. C4, 1560 (1971) -(with J. Da Providencia).
30. On Three-Body Clusters in Nuclear Matter, Phys. Rev. C5, 53 (1972) - (with J. Da Providencia).
31. Nuclear γ -Rays Following K^- Capture, Phys. Rev. C5, 238 (1972) - (with S.D. Bloom and M.S. Weiss).
32. Mutually Orthogonal Orthogonalized Plane Waves, Phys. Rev. B5, 4000 (1972) - (with G.E. Juras, J.E. Monahan and R.M. Thaler).

33. Comparison of the Spectra of O^{18} and F^{18} Calculated with Woods-Saxon and Harmonic-Oscillator Wave Functions, Phys. Lett. 37B, 151 (1971) - (with H.C. Pradhan).
34. Intermediate Structure and Photodisintegration of O^{16} , Phys. Rev. C5, 1898 (1972)-(with W. Wang).
35. Method to Investigate the Off-Shell Effects of the High-Energy Part of the Two-Nucleon Interactions, Phys. Rev. C5, 59 (1972) - (with J.E. Monahan and R.M. Thaler).
36. Scattering from Correlated Systems, Ann. Phys. (N.Y.) 76, 333 (1973) - (with R.R. Scheerbaum and R.M. Thaler).
37. Charge-Dependent Effects in the Photodisintegration of 4He , Phys. Rev. Lett. 26, 1729 (1972) - (with J.T. Londergan).
38. Theory of Elastic Scattering of Nucleons from Correlated Nuclei, Phys. Rev. C7, 494 (1973) - (with R.M. Thaler).
39. Generator Coordinate Method and Short-Range Correlations, Z. Naturforsch. 28a, 393 (1973) - (with J. Da Providencia).
40. Center-of-Mass Motion in Many-Particle Systems, Phys. Rev. C7, 925 (1973) - (with D. Ernst and R.M. Thaler).
41. Evidence for a Giant Quadrupole Resonance in Oxygen, Phys. Rev. Lett. 30, 301 (1973) - (with W.L. Wang).
42. Threshold Photodisintegration of Li^6 , Phys. Rev. C7, 1820 (1973) - (with M.S. Weiss).
43. Addendum: Three-Body Cluster in Nuclear Matter, Phys. Rev. C6, 1455 (1972) - (with J. Da Providencia).
44. Center-of-Mass Motion in Many Particle Systems II. Critique of the Gartenhaus-Schwartz Transformation, Phys. Rev. C7, 1340 (1973) - (with D. Ernst and R.M. Thaler).
45. Off-Shell Effects in Nucleon-Nucleus Scattering, Phys. Rev. C7, 2346 (1973)-(with R.R. Scheerbaum and R.M. Thaler).
46. Nuclear Polarization and the Muonic X-Ray Spectrum of Pb, Phys. Rev. C8, 411 (1973)-(with D. Ernst and R.M. Thaler).
47. Separable Representations of Two-Body Interactions, Phys. Rev. C8, 46 (1973)-(with D. Ernst and R.M. Thaler).
48. Center-of-Mass Effects and Angular Momentum Projection, Phys. Rev. C8, 440 (1973)-(with D. Ernst and R.M. Thaler).
49. Inverse Problems with Constraints, Phys. Rev. Lett. 30, 929 (1973)-(with D.J. Ernst, J.E. Monahan and R.M. Thaler).
50. Definition of the Nucleon-Nucleus Optical Potential by Means of the Low Equation, Phys. Rev. C8, 855 (1973)-(with D.J. Ernst and R.M. Thaler).
51. Nuclear Rearrangement Scattering I: Quasi-Free (p,2p) Reactions, Phys. Rev. C9, 116 (1974)-(with

- R.R. Scheerbaum).
52. Extension of the Effective Range Theory Off the Energy Shell, Phys. Rev. C10, 2176 (1974)-(with D.J. Ernst and R.M. Thaler).
 53. Separable Presentations of T Matrices Valid in the Vicinity of Off-Shell Points, Phys. Rev. C9, 1780 (1974)-(with D.J. Ernst and R.M. Thaler).
 54. A Numerical Study of a Separable Approximation to a Local Potential, Phys. Rev. C8, 2056 (1973)-(with D.J. Ernst, R.M. Thaler and D.L. Weiss).
 55. Off-Shell Effects in Elastic Pion-Nucleus Scattering, Phys. Rev. C9, 1370 (1974)-(with D.J. Ernst and R.M. Thaler).
 56. Cluster Model and Photodisintegration of ${}^6\text{Li}$, Phys. Rev. C9, 1679 (1974)-(with M.S. Weiss).
 57. Nuclear Rearrangement Scattering II: Scattering of Composite Particles with Application to the Deuteron Optical Model and Deuteron Stripping Ann. Phys. (N.Y.) 89, 299 (1975)-(with R.R. Scheerbaum).
 58. Unitarity and Off-Shell Effects in the Impulse Approximation, Phys. Rev. C9, 1374 (1974)-(with D.J. Ernst and R.M. Thaler).
 59. Angular Distribution and Polarization of ${}^{16}\text{O}((, n) {}^{15}\text{O})$, Phys. Rev. C9, 2144 (1974)-(with W.L. Wang).
 60. Multiple Scattering Theory and the Relativistic Optical Model, Phys. Rev. C9, 398 (1974)-(with L. Celenza, M.K. Liou and L.C. Liu).
 61. Relativistic Wave Functions for Pion-Nucleon and Pion-Nucleus Scattering, Phys. Rev. C10, 435 (1974)-(with L. Celenza, M.K. Liou and L.C. Liu).
 62. Description of Excited States in Systems with Short-Range Correlations, Nucl. Phys. A242, 376 (1975)-(with J. Da Providencia).
 63. Nucleon-Nucleon Correlations and Pion-Nucleus Interactions, Phys. Rev. C11, 437 (1975)-(with L. Celenza and L.C. Liu).
 64. Role of Orthogonality Scattering in the Scattering of Composite Particles, Phys. Rev. C11, 765 (1975)-(with M.S. Weiss).
 65. Covariant Pion-Nucleus Optical Potential, Phys. Rev. C11, 1593 (1975). Erratum, Phys. Rev. C12, 721 (1975)-(with L. Celenza and L.C. Liu).
 66. Crossing, Unitarity and the Impulse Approximation in Pion-Nucleus Scattering, Phys. Rev. C12, 194 (1975)-(with L. Celenza and L.C. Liu).

67. Calculation of the Covariant Pion-Nucleus Optical Potential I. Kinematical Aspects, Phys. Rev. C12, 1983 (1975)-(with L. Celenza and L.C. Liu).
68. Effective Pion-Nucleon Interaction in Nuclear Matter, Phys. Rev. C14, 1090 (1976)-(with L. Celenza and L.C. Liu and W. Nutt).
69. Covariant Calculation of the Pion-⁴He Elastic Scattering in the (3,3) Resonance Region, Phys. Rev. C13, 2451 (1976)-(with L.C. Liu).
70. Determination of Nuclear Amplitudes from the Study of Coulomb-Nuclear Interference, Phys. Rev. C15, 1164 (1977)-(with L.C. Liu).
71. Nuclear Structure Studies via Pion-Nucleus Elastic Scattering at 1 GeV, Phys. Rev. C14, 1885 (1976)-(with L.C. Liu).
72. Translationally Invariant Self-Consistent Field Theories, Phys. Rev. C15, 1911 (1977)-(with M.S. Weiss).
73. Pion Absorption and Production in Nuclear Reactions I. The Vertex Function, Phys. Rev. C16, 1107 (1977)-(with W.T. Nutt).
74. Can Multiple Scattering Theory Explain the Low-Energy Pion-Nucleus Interaction?, Phys. Rev. C16, 333 (1977)-(with L.C. Liu).
75. Pion-Nucleon Vertex Function with an Off-Shell Nucleon, Phys. Lett. 69B, 290 (1977)-(with W.T. Nutt).
76. How Useful is the Fixed Scatterer Approximation in Pion Physics?, Phys. Rev. C16, 1963 (1977)-(with L.C. Liu).
77. Measurement of Pion-Nucleus Total Cross Sections as a Test for Existence of a Pion Condensate, Phys. Lett. 72B, 23 (1977)-(with L.S. Celenza and W.T. Nutt).
78. Determination of Spectroscopic Amplitudes from Electron-Scattering Data, Nuovo Cimento 53, 142 (1979)-(with L.C. Liu).
79. Off-Shell Model of the Pion-Nucleon T Matrix, Phys. Rev. C18, 604 (1978)-(with L.C. Liu).
80. Role of the Second-Order Optical Potential in Pion-Oxygen Scattering, Phys. Rev. C19, 129 (1979)-(with L.C. Liu).
81. Reaction Cross Section for Low-Energy Pion-Nucleus Scattering, Phys. Lett. 78B, 389 (1978)-(with L.C. Liu).
82. Theory of the Optical Potential for Strongly Interacting Particles, Phys. Rev. C20, 2339 (1979)-(with L.C. Liu).
83. Orthogonality Constraints and Proton Induced Reactions, Phys. Rev. C20, 385 (1979)-(with L.S. Celenza).
84. Theoretical Models for the Calculation of the Reaction $(\pi + d \rightarrow p + p)$ in the Resonance Region, Nuovo Cimento 56A, 502 (1980)-(with R.S. Bhalerao and L.C. Liu).

85. Estimate of Correlation Effects in Relativistic Mean-Field Theories of Nuclei, Phys. Rev. C20, 1195 (1979)-(with L.C. Liu).
86. Systematic Features of the Pion-Nucleus Interaction, Phys. Rev. C21, 1903 (1980)-(with R.S. Bhalerao and L.C. Liu).
87. Self-Energy of the ρ Resonance in Finite Nuclei and Fermi Broadening, Phys. Rev. C21, 2103 (1980)-(with R.S. Bhalerao and L.C. Liu).
88. Boson-Exchange Potentials and the Nucleon Potential Energy in Nuclear Matter, Phys. Rev. C23, 569 (1981)-(with M.R. Anastasio and L.S. Celenza).
89. Nuclear Saturation as a Relativistic Effect, Phys. Rev. Lett. 45, 2096 (1980)-(with M.R. Anastasio and L.S. Celenza).
90. S-Wave Repulsion in the Pion-Nucleus Optical Potential and the Sub-threshold Pion-Nucleon T Matrix, Phys. Rev. C23, 2198 (1981)-(with R.S. Bhalerao).
91. Relativistic Effects in the Bethe-Brueckner Theory of Nuclear Matter, Phys. Rev. C23, 2273 (1981)-(with M.R. Anastasio and L.S. Celenza).
92. A Relativistic Model of Interacting Nucleons and Mesons, Phys. Rev. C23, 2258 (1981)-(with M.R. Anastasio and L.S. Celenza).
93. Dirac Phenomenology in Nuclear Structure and Reactions, Phys. Rev. C23, 2606 (1981)-(with M.R. Anastasio and L.S. Celenza).
94. Relativistic Many-Body Theory, Phys. Rev. C24, 2704 (1981)-(with L.S. Celenza).
95. Quantum Field Theory and Nuclear Structure, Phys. Rev. D24, 912 (1981)-(with B. Goulard and L.S. Celenza).
96. Relativistic Theory of the Effective Interaction in Nuclei, Phys. Rev. Lett. 47, 156 (1981)-(with L.S. Celenza and W.S. Pong).
97. The Relativistic Shell Model I. Calculation of the Landau-Migdal Parameters, Phys. Rev. C25, 3115 (1982)-(with L.S. Celenza and W.S. Pong).
98. Nuclear Dynamics and Quasi-Elastic Electron Scattering, Phys. Rev. C26, 320 (1982)-(with L.S. Celenza, W.S. Pong and M.M. Rahman).
99. Relativistic Shell Model: Momentum-Transfer Dependence of the Effective Force in Nuclei, Phys. Rev. C27, 1799 (1983)-(with L.S. Celenza and W.S. Pong).
100. Longitudinal and Transverse Response Functions for Quasi-Elastic Electron Scattering, Phys. Rev. C27, 2792 (1983)-(with L.S. Celenza and W.S. Pong).

101. Quark Model Calculations of Nucleon Structure Functions, Phys. Rev. C27, 1561 (1983); (E) C39, 2477 (1989)-(with L.S. Celenza).
102. Translational Invariance and Soliton Models of the Nucleon, Phys. Rev. C28, 2042 (1983)-(with L.S. Celenza).
103. Relativistic Nuclear Optical Models, Phys. Rev. C28, 1256 (1983)-(with L.S. Celenza).
104. Relativistic and Non-Relativistic Theories of the Nuclear Optical Potential, Phys. Rev. C29, 1784 (1984)-(with L.S. Celenza).
105. Covariant Soliton Dynamics: The Structure of the Nucleon, Phys. Rev. C31, 212 (1985)-(with L.S. Celenza and A. Rosenthal).
106. Many-Body Soliton Dynamics: Modification of Nucleon Properties in Nuclei, Phys. Rev. C31, 232 (1985)-(with L.S. Celenza and A. Rosenthal).
107. Symmetry Breaking, Quark Deconfinement and Deep-Inelastic Electron Scattering, Phys. Rev. Lett. 53, 892 (1984)-(with L.S. Celenza and A. Rosenthal).
108. Microscopic Foundations of Dirac Phenomenology, Phys. Rev. C31, 63 (1985)-(with L.S. Celenza and A. Harindranath).
109. Evidence for Modification of Nucleon Properties in Nuclei from Traditional Nuclear Physics Experiments, Phys. Rev. C31, 63 (1985)-(with L.S. Celenza, A. Harindranath and A. Rosenthal).
110. Covariant Description of Mesons as Nontopological Solitons, Phys. Rev. D33, 198 (1986)-(with L.S. Celenza and R.B. Thayyullathil).
111. Quark Effects in Nuclear Longitudinal Response Functions, Phys. Rev. C32, 650 (1985)-(with L.S. Celenza and A. Harindranath and A. Rosenthal).
112. Effects of Medium-Modified Form Factors in Quasielastic Electron Scattering from ^{12}C , Phys. Rev. C32, 248 (1985)-(with L.S. Celenza and A. Harindranath).
113. Quark Effects in the Charge Distribution of ^{208}Pb , Phys. Rev. C31, 1944 (1985)-(with L.S. Celenza, A. Harindranath and A. Rosenthal).
114. An Effective Lagrangian for Quantum Chromodynamics: The Structure of Hadrons, Phys. Rev. D32, 1807 (1985)-(with L.S. Celenza).
115. Distribution of Charge and Matter in Nuclei: The Charge Density Difference of ^{206}Pb and ^{205}Tl , Phys. Rev. C32, 2173 (1985)-(with L.S. Celenza and A. Harindranath).

116. Nuclear Collective Response Calculated with Realistic Forces, Phys. Rev. C32, 2095 (1985)-(with L.S. Celenza and C. Matyas).
117. Sum Rules for the Longitudinal Response in Inclusive Electron Scattering, Phys. Rev. C33, 1012 (1986)-(with A. Harindranath and L.S. Celenza).
118. Description of the Gluon Condensate, Phys. Rev. D34, 1591 (1986)-(with L.S. Celenza).
119. Exotic States in QED, Phys. Rev. Lett. 57, 55 (1986)-(with L.S. Celenza, V.K. Mishra and K.F. Liu).
120. Covariant Soliton Dynamics: Role of the gluon condensate in hadron spectroscopy, Phys. Rev. D34, 3530 (1986)-(with V.M. Bannur, S.A. Barve, L.S. Celenza and V.K. Mishra).
121. Phenomenological Potentials for QCD Order Parameters, Phys. Rev. D35, 2843 (1987)-(with L.S. Celenza).
122. Effective Interaction for Relativistic Mean-Field Theories of Nuclear Structure, Phys. Rev. C35, 2299 (1987) - (with H.B. Ai, L.S. Celenza and A. Harindranath).
123. Coherent-State Representation for the QCD Ground State, Phys. Rev. D36, 895 (1987) - (with L.S. Celenza and C.R. Ji).
124. Bound-State Problem in Quantum Field Theory: Linear and Nonlinear Dynamics, Phys. Rev. D36, 2506 (1987) - (with L.S. Celenza and Chueng-Ryong Ji).
125. Nontopological Solitons in Strongly Coupled QED, Phys. Rev. D36, 2144 (1987) - (with L.S. Celenza and Chueng-Ryong Ji).
126. Basis for Relativistic Models of Nuclear Structure in Field-Theoretic Models of the Strong Interaction, Phys. Rev. C37, 265 (1988) - (with L.S. Celenza and Chueng-Ryong Ji).
127. Confined Phase of Electroweak Theory and the e^+e^- Peaks Observed in Large-Z Heavy-Ion Collisions, Nucl. Phys. A489, 751 (1988) - (with L.S. Celenza, A. Pantziris and Hui-Wen Wang).
128. Relativistic Quasiparticle Method in Nuclear Physics, Phys. Rev. C39, 236 (1989) - (with H.B. Ai, L.S. Celenza and Shun-fu Gao).
129. Space-time Propagation of Confined Gluons, Intl. J. Mod. Phys. A 4, 3807 (1989) - (with L.S. Celenza, Hui-Wen Wang and Xin-Hua Yang).
130. Propagation of Hadrons in the QCD Vacuum, Ann. of Phys. 192, 254 (1989).
131. Role of Gluons in the Dynamical Origin of the Proton Spin, Intl. J. Mod. Phys. A 4, 4279 (1989) - (with L.S.

Celenza, A. Pantziris and Hui-Wen Wang).

132. Mean-field Theory of Confined Particles: Off-Mass-Shell Aspects of Relativistic Wave Functions - Intl. J. Mod. Phys. A 5, 1479 (1990) - [with V.M. Bannur, L.S. Celenza, Huang-he Chen, Shun-fu Gao].
133. Calculation of Scalar Form Factors of Nontopological Solitons - Intl. J. Mod. Phys. A 5, 1509 (1990) - (with L.S. Celenza and A. Pantziris).
134. Quark Physics at Multi-GeV Electron Beam Accelerators, Phys. Rev. C41, 366 (1990) - (with L.S. Celenza, A. Pantziris and Hui-Wen Wang).
135. Off-Mass-Shell Dynamics in the Calculation of Deep Inelastic Scattering from Nucleons and Nuclei, Phys. Rev. C41, 176 (1990) - (with A. Pantziris, C.M. Shakin and Hui-Wen Wang).
136. Relativistic Quasiparticle Description of the Structure of Finite Nuclei, Phys. Rev. C41, 1768 (1990) - (with L.S. Celenza and Shun-fu Gao).
137. Theory of Deep-Inelastic Scattering from Light Nuclei, Phys. Rev. C41, 2229 (1990) - (with L.S. Celenza and A. Pantziris).
138. Asymmetry in Deep-Inelastic Scattering of Polarized Leptons from Polarized ^2H and ^3He , Phys. Rev. C41, 2241 (1990). - (with L.S. Celenza, Shun-Fu Gao and A. Pantziris).
139. Study of Power-Law Corrections to Scaling in a Relativistic Quark Model, Intl. J. Mod. Phys. A5, 259 (1990) - (with L.S. Celenza, A. Pantziris and Hui-Wen Wang).
140. Electromagnetic Probes of Nuclear Structure: Sum Rules, γ Scaling, and Final State Interactions, Phys. Rev. C42, 1989 (1990) - (with L.S. Celenza and W. Koepf).
141. Density Matrix of Relativistic Nuclear Matter, Phys. Rev. C43, 181 (1991) - (with Sara Cruz-Barrios, L.S. Celenza and A. Pantziris).
142. Kinematic Factors in the Theory of γ Scaling, Phys. Rev. C43, 425 (1991) - (with W. Koepf and L.S. Celenza).
143. Nuclear Matter Ward Identity and the Theory of Final-State Interactions in Exclusive and Inclusive Reactions, Phys. Rev. C43, 1367 (1991) - (with L.S. Celenza, A. Pantziris and Hui-Wen Wang).
144. Incoherent Two-Photon Production of the Higgs Boson in Relativistic Heavy-Ion Collisions, Phys. Rev. C43, 2422 (1991) - (with J. S. Wu, C. Bottcher and M.R. Strayer).
145. Boost-Invariant Description of Nuclear Matter, Phys. Rev. C44, 1012 (1991) - (with S. Glazek).
146. γ -Scaling Analysis for Inelastic Scattering from Relativistic Targets, Phys. Rev. C44, 2130 (1991) - (with L.S.

Celenza and W. Koepf).

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148. Quasielastic Electron Scattering and the Modification of Mesonic Mass Parameters in Nuclei, Intl. J. Mod. Phys. A 7, 1921 (1992) (with S. Cruz Barrios, L.S. Celenza, Shun-fu Gao and A. Pantziris).
149. Covariant Description of Dynamical Processes in Relativistic Nuclear Matter, Phys. Rev. C45, 205 (1992) - (with L.S. Celenza and A. Pantziris).
150. Partial Restoration of Chiral Symmetry in Nuclear Matter, Phys. Rev. C45, 2015 (1992) - (with L.S. Celenza, A. Pantziris and Wei Dong Sun).
151. Interpretation of Scalar Fields of the Relativistic Brueckner-Hartree-Fock Formalism, Phys. Rev. C46, 571 (1992) - (with L.S. Celenza, A. Pantziris and Wei Dong Sun).
152. Quasiparticle Properties of the Quarks of the Nambu! Jona-Lasinio Model, Phys. Rev. C46, 2535 (1992) - (with Nan-Wei Cao and Wei-Dong Sun).
153. Chiral Symmetry and the Nucleon-Nucleon Interaction: Tensor Decomposition of Feynman Diagrams, Phys. Rev. C46, 2213 (1992) - (with L.S. Celenza and A. Pantziris).
154. Quark Condensate at Finite Baryon Density Phys. Rev. C48, 159 (1993) - (with L.S. Celenza, Wei-Dong Sun and Xiquan Zhu).
155. Low-Mass Scalar Mesons in Nuclear Physics: Multiloop Effects in the Bosonization of the Nambu-Jona-Lasinio Model, Intl. J. Mod. Phys. E2, 437 (1993) - (with L.S. Celenza and J. Szweda).
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157. Scalar-Isoscalar Correlator in a Phenomenological Coupled-Channel Quark Model, Intl. J. Mod. Phys. E2, 603 (1993) - (with L.S. Celenza, Wei-Dong Sun, J. Szweda and Xiquan Zhu).
158. Properties of the Rho Meson in Nuclear Matter, Phys. Rev. C49, 1185 (1994) - (with Wei-Dong Sun).
159. Relation of QCD Sum Rules in Matter and the Nuclear Many-Body Problem, Phys. Rev. C50, 1129 (1994).
160. Structure Functions of Off-Mass-Shell Pions and the Calculation of the Sullivan Process, Phys. Rev. C50, 2553 (1994) - (with Wei-Dong Sun).
161. Quark Model Calculations of Current Correlators in the Nonperturbative Domain, Ann. Phys. (N.Y.) 241, 1 (1995) -

- (with L.S. Celenza, Wei-Dong Sun, J. Szweda and Xiquan Zhu).
162. Interpolation Between the Low-Energy and High-Energy Behavior of Hadronic Current Correlation Functions, *Ann. Phys. (N.Y.)* 241, 37 (1995) - (with Wei-Dong Sun and J. Szweda).
 163. Use of the Nambu-Jona-Lasinio Model in the Calculation of Four-Quark Condensates, *Phys. Rev.* C51, 937 (1995) - (with L.S. Celenza, Wei-Dong Sun and J. Szweda).
 164. Vertex Functions for Confined Quarks in Momentum-Space Quark-Hadron Models, *Phys. Rev.* D51, 3638 (1995) - (with L.S. Celenza, Wei-Dong Sun, J. Szweda and Xiquan Zhu).
 165. Deep-Inelastic Scattering from the Pion and the Choice of Phenomenological Wave Functions, *Phys. Rev.* C51, 2171 (1995) - (with Wei-Dong Sun).
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 167. Generalized NJL Model in a Study of the Boson-Exchange Model of Nuclear Forces, *Phys. Rev.* C52, 3353 (1995) - (with Wei-Dong Sun and J. Szweda).
 168. Meson-Mode Mixing in the Calculation of the Nucleon-Nucleon Interaction, *Phys. Rev.* C52, 3502 (1995) - (with Wei-Dong Sun and J. Szweda).
 169. Many-Body Theory of $\rho - \omega$ Mixing, *Phys. Rev.* C53, 1374 (1996) - (with Shun-fu Gao and Wei-Dong Sun).
 170. Bosonization in the Presence of Confinement: Calculation of the Nucleon-Nucleon Interaction, *Phys. Rev.* C53, 1936 (1996) - (with Shun-fu Gao, L.S. Celenza, Wei-Dong Sun and J. Szweda).
 171. Calculation of the Nucleon-Nucleon Interaction Due to Vector-Meson Exchange, *Phys. Rev.* C54, 487 (1996) - (with L.S. Celenza and Wei-Dong Sun).
 172. Quark-Quark Correlations in the Nucleon in a Generalized NJL Model, *Few-Body Systems* 20, 93 (1996) - (with L.S. Celenza, Wei-Dong Sun, and J. Szweda).
 173. Use of Quark Wave Functions in the Calculation of the Structure Functions of Mesons, *Phys. Rev.* C53, 3152 (1996) - (with Wei-Dong Sun).
 174. Gauge Invariance and Confinement in a Generalized Nambu-Jona-Lasinio Model, *Phys. Rev.* C54, 1414 (1996) - (with Wei-Dong Sun).
 175. Scalar-Isoscalar Meson Exchange in the Calculation of the Nucleon-Nucleon Interaction, *Phys. Rev.* C55, 614 (1997)

- (with Wei-Dong Sun).

176. Microscopic Foundations of the Vector Meson Dominance Model and the Analysis of Rho-Omega Mixing Phys. Rev. D55, 2874 (1997) - (with Wei-Dong Sun).
177. Chiral Symmetry Breaking in the Presence of a Confining Interaction, Phys.Rev. C55, 1492 (1997) - (with L.S. Celenza and Xiang-Dong Li).
178. Calculation of the Properties of the F Meson in a Generalized Nambu-Jona-Lasinio Model with Lorentz-Vector Confinement, Phys. Rev. C55, 3083 (1997) - (with L.S. Celenza and Xiang-Dong Li).
179. Singlet-Octet Mixing of Scalar Mesons in a Generalized Nambu—Jona-Lasinio Model, Phys. Rev. C56 , 3326 (1998) - (with L.S. Celenza and Xiang-Dong Li).
180. B - a_1 Mixing at Intermediate Energies, Phys. Rev. C58, 1845 (1998) - (with L.S. Celenza and Bo Huang)
181. Radial Excitations in the Analysis of N - T and 0 - 0 r Mixing, Phys. Rev. C58 , 3648 (1998) - (with Bo Huang and Xiang-Dong Li)
182. Covariant Confinement Model for the Calculation of Radial Excitations of the Pion, Phys. Rev. C59, 1041 (1999) - (with L.S. Celenza and Bo Huang).
183. T Matrices and Current Correlation Functions for a Relativistic Quark Model with Confinement, Phys. Rev. C59, 1030 (1999) - (with L.S. Celenza and Bo Huang).
184. Role of a Covariant Confinement Model in the Calculation of the Two-Photon Decay of the 0 and 0 \parallel , Phys. Rev. C59, 1700(1999) - (with L.S. Celenza and Bo Huang).
185. Importance of Pseudoscalar — Axial-Vector Mixing in a Calculation of the Properties of the B, 0 and 0 \parallel Mesons, Phys. Rev. C59, 2814 (1999) - (with L.S. Celenza and Bo Huang).
186. Covariant Confinement Model for the Study of the Properties of Light Mesons, (with L.S. Celenza, Bo Huang, Huangsheng Wang) - Phys. Rev. C60, 025202 (1999).
187. Covariant Calculation of the Properties of f_2 Mesons in a Generalized Nambu! Jona-Lasinio Model, Phys.Rev. C 60, 035206 (1999) - (with L.S. Celenza, Bo Huang, and Huangsheng Wang).
188. Regularization of Covariant Calculations of Meson Decay Amplitudes at One-loop-order: Properties of the a_0 (980) Resonance, Phys. Rev., C60, 065210 (1999) - (with L.S. Celenza, Bo Huang, and Huangsheng Wang).
189. Pseudoscalar — Axial-Vector Mixing for the Kaon and its Radial Excitations, Phys. Rev. C60,065209

(1999) (with L.S. Celenza, Bo Huang, and Huangsheng Wang).

190. Covariant Confinement Model for the Calculation of the Properties of Scalar Mesons, Phys. Rev. C61, 035201 (2000) - (with L.S. Celenza, Bo Huang, and Huangsheng Wang) Phys Rev. C61, 035201 (2000).
191. Calculation of the Distribution of Scalar Glueball Strength, Phys. Rev. C62, 068201 (2000) - (with L.S. Celenza, Bo Huang and Huangsheng Wang).
192. Evidence for a $K_0^*(1730)$ Meson Resonance, Phys. Rev. D62, 114014 (2000) - (with Huangsheng Wang).
193. Intrinsic and Dynamically Generated Scalar Meson States, Phys. Rev. D63, 014019 (2001)- (with Huangsheng Wang).
194. Application of a Generalized Nambu—Jona-Lasinio Model to the Calculation of the Properties of Scalar Mesons and Nuclear Matter, Phys. Rev. C63, 025209 (2001) - (with Huangsheng Wang).
195. Calculation of the Decay Constants of Scalar Mesons, Phys. Rev. D63, 0740XX (2001) - (with Huangsheng Wang).

II. Contributions to Conferences and Workshops

1. "Resonance Reactions", in Les Mechanisms Des Reactions Nucleaires, Cours de perfectionnement de l'association vaudoise des chercheurs en physique, Grachen/Saint-Nicholas, (MRP, Lausanne, 1964) p. 253.
2. Generalized Hartree-Fock Calculations for Zr^{90} Using an Effective Interaction, in International Nuclear Physics Conference, Edited by R.L. Becker, C.D. Goodman, P.H. Stelson, A. Zucker, Academic Press (1967), p. 706 (with J. Svenne and Y.P. Waghmare).
3. Microscopic Calculations for the Escape Width of Analog States, in Nuclear Isospin, Edited by J.D. Anderson, S.D. Bloom, J. Cerny, W.W. True, Academic Press, N.Y. (1969), p. 403 (with N. Auerbach, J. Hufner and A.K. Kerman).
4. The Role of the Anti-Analog State in the Decay of the Analog State, in Nuclear Isospin, Academic Press, N.Y. (1969), p. 409 (with N. Auerbach, J. Hufner and A.K. Kerman).
5. Decay of the Giant Resonance and Intermediate Structure, Invited Paper presented at the International Conference on Photonuclear Reactions and Applications, Asilomar Conference Grounds, Pacific Grove, California (March 26-30, 1973).
6. "Pion-Nucleus Elastic Scattering", in Meson-Nuclear Physics - 1979, A.I.P. Conference Proceedings: No. 54, Edited by E.V. Hungerford III, A.I.P. (New York, 1979) p. 550.
7. Relativistic Brueckner-Hartree-Fock Theory: Theoretical Foundations and Empirical Evidence, in Interaction Between Medium-Energy Nucleons in Nuclei - 1982, Edited by H.O. Meyer, American Institute of Physics, (New York, 1983).
8. The Quark Presence in Nuclei: Dynamics of a Dilute System of Nontopological Solitons, in Proceedings of the Lewes Workshop on Solitons in Nuclear and Elementary Particle Physics, Edited by A. Chodos, E. Hadjimichael and C. Tze (World Scientific, Singapore - 1984).
9. Quark Presence in Nuclei, in Nucleon and Nuclear Structure and Exclusive Electromagnetic Reaction Studies, Edited by G.H. Rawitscher (University of Connecticut, Storrs - 1984).
10. Partial Quark Deconfinement in Nuclei, in Proceedings of the Conference on Hadronic Probes and Nuclear Interactions, Edited by J.R. Comfort, W.R. Gibbs and B.G. Ritchie, (AIP., New York, 1985) p. 192.

11. Off-Shell Effects, Form Factors and Electromagnetic Operators in Nuclei, short invited talk presented at the Eleventh Europhysics Conference, Nuclear Physics with Electromagnetic Probes (Paris, July 1-5, 1985). Nucl. Phys. A446, 323 (1985).
12. Nuclear Chromodynamics, in Proceedings of the Bates Users Theory Group Workshop on Relativistic Effects and Hadronic Structure, Edited by J. Dubach and F. Gross (M.I.T., Cambridge, Mass. -Aug. 9-10, 1985).
13. Field Theory, Quarks and Nuclear Structure, in Nuclear Chromodynamics: Quarks and Gluons in Particles and Nuclei, Edited by S. Brodsky and E. Moniz (World Scientific, Singapore, 1986).
14. Field Theory, Quark and Nuclear Structure, B.C.I.N.T. 85/111/147. Invited talk presented at the Fourth International Conference on Recent Progress in Many-Body Theories (San Francisco State University, Aug. 1985). To be published in the proceedings.
15. Electromagnetic Response in Terms of the Quark Structure, Weak and Electromagnetic Interactions in Nuclei, Edited by H.V. Klapdor (Springer-Verlag, Berlin, 1986).
16. Modification of Nucleon Properties in Nuclei, Invited talk presented at the Workshop on Electronuclear Physics with Internal Targets (SLAC Jan. 5-8, 1987). To be published in the proceedings.
17. Condensates in the Standard Model, in Nuclear and Atomic Physics at One Gigaflop, Edited by C. Bottcher, M.R. Strayer and J.B. McGrory (Harwood, New York, 1989).
18. Nature of QCD and the Basis for Relativistic Nuclear Physics, in Relativistic Nuclear Many-Body Physics (Ohio State University, June 6-9, 1988) Editors: B.C. Clark, R.J. Perry, and J.P. Vary (World Scientific, Singapore, 1989) p. 184.
19. Chiral Symmetry Breaking and Confinement in the QCD Vacuum, in Nuclear and Particle Physics on the Light Cone, Editors: M.B. Johnson and L.S. Kisslinger (World Scientific, Singapore, 1989) p. 224.
20. From Quarks to Nuclei, in Proceedings of the International Conference on Medium and High-Energy Nuclear Physics, (May 23-27, 1988). Edited by W.-Y. Pauchy Hwang, Keh-Fei Liu and Yiharn Tzeng. (World Scientific, Singapore, 1989) p 77.

III. Review Articles

1. A Theory of Analog Resonances, *Rev. Mod. Phys.* 44, 48 (1972)-(with Naftali Auerbach, Jorg Hufner and A.K. Kerman).
2. Nuclear Structure, Nuclear Reactions and Strong Interactions in Fundamentals of Cosmic Physics, (1979) Vol. 5, pp. 47-111. (Gordon and Breach, New York, 1979) - (with L.C. Liu).
3. Pion-Nucleus Elastic Scattering: Theory and Application, in Progress in Particle and Nuclear Physics, Edited by D. Wilkinson (Pergamon Press, New York 1981)-(with L.C. Liu).
4. Relativistic Nuclear Structure Physics, *Phys. Rep.* 100, 327 (1983)-(with M. Anastasio, L.S. Celenza and W.S. Pong).
5. Effective Lagrangian Methods in QCD, in Chiral Solitons, Edited by K.F. Liu (World Scientific, Singapore, 1987) p.312 - (with L.S. Celenza).

IV. Books

1. Relativistic Nuclear Physics: Theories of Structure and Scattering
(World Scientific Publishers, Singapore - 1986)-(with L.S. Celenza).

V. Research Grants:

1. Theoretical Nuclear Physics Research: (National Science Foundation, 1972-1974)
Budget: \$178,204. Renewal Grant (NSF 1974-1976)
Requested Budget: \$229,000. Awarded at Case Western Reserve University; coinvestigators: Profs. K. Kowalski, R.M. Thaler and W. Tobocman.
2. Faculty Research Award, University Committee on Research of the City University of New York, July 1974-June 1975.
Budget: \$5,939.
3. Chancellor's Grant Program for Curricular Diversity, Dean M. Gabriel, Profs. C.M. Shakin and L. Walker
Project: A "Science Readiness" Program for Open Admissions Students
Budget: \$50,405. September 1, 1974-August 31, 1975.
4. Research in Intermediate and High-Energy Physics (National Science Foundation, June 1975-June 1977).
Budget: \$98,000. Coinvestigator: Prof. Victor Franco.
5. Faculty Research Award (FRAP), University Committee on Research of the City University of New York, July 1975-December 1976.
Budget: \$6,900.

6. Studies in Theoretical Nuclear Physics - National Science Foundation, July 1977-July 1980.
Budget: \$145,000.
7. PSC-BHE Faculty Research Award, University Committee on Research of the City University of New York, July 1979-July 1980.
Budget: \$7,761.
8. Studies in Theoretical Nuclear Physics - National Science Foundation, July 1980-June 1983.
Budget: \$171,000.
9. PSC-CUNY Faculty Research Award, University Committee on Research of the City University of New York, July 1980-July 1981.
Budget: \$4,110.
10. PSC-CUNY Faculty Research Award, University Committee on Research of the City University of New York, July 1981-July 1982.
Budget: \$7,300.
11. PSC-CUNY Faculty Research Award, University Committee on Research of CUNY, July 1982-July 1983.
Budget: \$5,200.
12. Studies in Theoretical Nuclear Physics (National Science Foundation, July 1983-June 1986).
Budget: \$242,000.
13. PSC-CUNY Faculty Research Award, University Committee on Research of CUNY, July 1983-July 1984.
Budget: \$9,600.
14. PSC-CUNY Faculty Research Award, University Committee on Research, July 1985-June 1986.
Budget: \$3321.
15. PSC-CUNY Faculty Research Award, University Committee on Research of CUNY, July 1986-June 1988.
Budget: \$16,433.
16. Studies in Theoretical Nuclear Physics - (with L.S. Celenza) - National Science Foundation, July 1986-June 1988.
Budget: \$230,000.
17. Studies in Theoretical Nuclear Physics - (with L.S. Celenza) - National Science Foundation, July 1988-June 1991.
Budget: \$369,000.
18. PSC-CUNY Faculty Research Award, University Committee of Research of CUNY, July 1989-June 1990.
(RF669364)
Budget: \$5,618.
19. PSC-CUNY Faculty Research Award, University Committee on Research of CUNY, July 1990-June 1991.
(RF661381)
Budget: \$7,447.
20. Studies in Theoretical Nuclear Physics - (with L.S. Celenza) - National Science Foundation, July 1991-June 1994
Budget: \$380,070.
21. PSC-CUNY Research Award Program, University Committee of Research of CUNY, July 1992-June 1993
(RF663370)
Budget: \$3,133.
22. PSC-CUNY Faculty Research Award Program University Committee of Research of CUNY, July 93-June 94
(RF664121)

Budget: \$2,507.

23. Studies in Theoretical Nuclear Physics - (with L.S. Celenza) - National Science Foundation, July 1991-July 1994-June 1997
Budget: \$285,000.
24. PSC-CUNY Faculty Research Award Program, July 1995 - June 1996
(RF666432)
Budget: \$4,002.
25. PSC-CUNY Faculty Research Award Program, July 1996 - June 1997
(RF667445)
Budget: \$3,848.
26. Studies in Theoretical Nuclear Physics (with L.S. Celenza) - National Science Foundation, July 1, 1997 - June 30, 2000
Budget: \$264,000.
27. PSC-CUNY Faculty Research Award Program, July 1997 - June 1998
(RF668468)
Budget: \$3,888
28. PSC-CUNY Faculty Research Award Program, July 1998 - June 1999
(RF669475)
Budget: \$3,481.
29. PSC-CUNY Faculty Research Award Program, July 1999 - June 2000
(RF61514-0-30)
Budget: \$3,374.
30. **PSC-CUNY Faculty Research Award Program, July 2000 - June 2001**
(RF62575-00-31)
Budget \$2837.00

University Committees:

Member:	School of Science and Department of Education Services Planning Task Force	Spring 1974
	School of Science Tenure Advisory Committee	Spring 1975
	Faculty Research Awards Program - Physics Panel	1974-1976
	School of Science Committee on Research	Spring 1976
	University Research Committee - Liaison in Physics	1975-1976
	Executive Committee of University Committee on Research	1977-1978
	Faculty Council Committee on Research	1980-1981, 1981-1982
	Faculty Advisory Committee	1982-1984
	Faculty Research Award Program Physics Panel	1983-1984
	Colloquium Committee	1973-1975, 1977-1992
	President's Task Force for Science	Summer, 1987
	Faculty Council Committee on Research	1991-1992

Colloquia, Seminars and Invited Talks: 1981-present

Colloquia Presented: 1981

Title: Quantum Field Theory and Nuclear Structure

1. Brown University
2. University of Connecticut
3. Brookhaven National Laboratory
4. Atomic Energy of Canada (Chalk River, Ontario)
5. University of Montreal

Colloquia and Seminars: 1982

1. Arizona State University (January 1982)
2. University of Buffalo (February 1982)
3. SUNY at Stony Brook (May 1982); (August 1982)
4. University of Washington (July 1982)
5. University of Maryland (September 1982)

Invited Talks: 1982

Indiana University Cyclotron Faculty Workshop, Oct. 28-30, 1982
"Relativistic Brueckner-Hartree-Fock Theory: Theoretical Foundations and Empirical Evidence"

Colloquia and Seminars: 1983

1. Massachusetts Institute of Technology (Feb. 1983)

Invited Talks: 1983

1. University of Maryland - Workshop (April 16)
"Relativistic Brueckner-Hartree-Fock Theory"
2. Virginia Polytechnic and State University -
Workshop on Nuclear Chromodynamics (Aug. 1-5)
"Aspects of Nuclear and Nucleon Structure"
3. Gordon Research Conference (Aug. 15-19)
"Relativistic Many-Body Theory"

Colloquia and Seminars: 1984

1. College of William and Mary
2. Los Alamos Scientific Laboratory
3. McMaster University
4. Suzhou University
5. Nanjing Teacher's University
6. Peking University
7. Institute for High-Energy Physics (Beijing)
8. Brown University
9. Yale University
10. SUNY at Stony Brook

Invited Talks: 1984

1. Workshop on Solitons in Nuclear and Particle Physics - (Lewes, Delaware) June 14-16, 1984
2. Twenty-third Eastern Conference on Theoretical Physics - (Penn. State University) October 26-27, 1984

Colloquia and Seminars: 1985

1. Los Alamos Scientific Laboratory
2. Ohio State University
3. Brookhaven National Laboratory
4. University of Virginia
5. University of Montreal
6. SUNY at Stony Brook (3 seminars)
7. University of Maryland
8. Hunter College of CUNY
9. Carnegie-Mellon University

Invited Talks: 1985

1. American Physical Society Meeting, Crystal City, Va. (April 24-27, 1985)
"Quark Presence in Nuclei"
2. Workshop on Hadron Interaction with Nuclei, Arizona State University - Tempe, Arizona (March 11-14, 1985)
"Partial Quark Deconfinement in Nuclei"
3. Eleventh Europhysics Conference on Nuclear Physics with Electromagnetic Probes, Paris, France (July 1-5, 1985)
"Off-Shell Effects, Form Factors and Electromagnetic Operators in Nuclei"
4. Bates Users Group Workshop - M.I.T. (Aug. 9-10, 1985)
"Principles of Nuclear Chromodynamics"
5. Workshop on Nuclear Chromodynamics - Institute for Theoretical Physics, Santa Barbara (August 12-23, 1985)
"New Approaches to Low-energy QCD"
6. Third Summer Institute in Theoretical Physics (The Strong Interaction at Low Energies), Kingston, Canada (July 1985)

Colloquia and Seminars: 1986

1. Michigan State University
2. Ohio State University
3. City College of CUNY
4. SUNY at Stony Brook
5. University of Maryland
6. University of Kentucky
7. University of Maryland
8. Lehman College of CUNY

Invited Talks: 1986

1. CEBAF Workshop, Newport News - June 23-27, 1986
2. International Symposium on Weak and Electromagnetic Interactions in Nuclei, July 1-5, 1986 (Heidelberg)

Invited Talks: 1987

1. Workshop on Electronuclear Physics with Internal Targets, Stanford Linear Accelerator, Jan. 5-8, 1987
"Modification of Nucleon Properties in Nuclei"
2. Gordon Conference on Physics and Chemistry of Simple Systems, Wolfboro, N.H. (Aug. 10-14, 1987)
"
The Impact of QCD on Nuclear Physics"

Colloquia and Seminars: 1988

1. University of Maryland, (Sept. 28-29)
2. University of Arizona, (Jan. 18-20)

Invited Talks: 1988

1. Conference on Computational Atomic and Nuclear Physics at One Gigaflop - Oak Ridge, Tenn. (April 14-16, 1988)
"Condensates in the Standard Model"
2. International Conference on Medium and High-Energy Nuclear Physics, Taipei, Taiwan (May 23-27, 1988)
"From Quarks to Nuclei" (manuscript sent by post)
3. Workshop on Relativistic Nuclear Many-Body Physics, Columbus, Ohio (June 6-9, 1988)
"Nature of QCD and the Basis for Relativistic Nuclear Physics"
4. Workshop on Nuclear and Particle Physics on the Light Cone, Los Alamos, New Mexico (July 18-22, 1988)
"Chiral Symmetry Breaking and Confinement in the QCD Vacuum"

Colloquia and Seminars: 1989

1. Pennsylvania State University (February 22)
2. University of Maryland (September 20)

Colloquia and Seminars: 1990

1. University of Pennsylvania (January 12)
2. Carnegie Mellon University (February 22)
3. Kent State University (March 7)
4. University of Tennessee (September 19)

Colloquia and Seminars: 1991

1. Duke University (December 3)

Colloquia and Seminars: 1992

1. Vanderbilt University (January 31)
2. University of Maryland (October 14)

Colloquia and Seminars: 1995

1. Temple University (October 30)

Invited Talks: 1998

1. Conference on the Structure of Mesons, Baryons and Nuclei - Krakow, Poland - (May 26-30, 1998)