Bibliography of Stephen L. Adler

Books


Patent

U.S. Patent No. 5,261,035 – “Neural Network Architecture Based on Summation of Phase–Coherent Alternating Current Signals.”

Summer School Lectures


Conference Proceedings and Other Contributions


Accelerator Neutrino Physics, Present and Future - A Review for Theorists and Experimentalists, Notes for talk given at the NAL Topical Conference on Neutrino Physics, March 29-30, 1974. (Unpublished)


Photon Pairing Instabilities: A Microscopic Origin for Gravitation?, to be published in the proceedings of the 8th International Conference on General Relativity & Gravitation, August 7-12, 1977, Ontario, Canada. 9/78: The volume was not published. This work appears only as an IAS Preprint COO-2220-120, Aug. 1977.


Quaternionic Quantum Field Theory, in the Proceedings of the Tenth Hawaii Conf. on High Energy Physics, S. Pakvasa and S.F. Tuan, eds. (Univ. of Hawaii Press, Manoa/Honolulu, 1985).


Snowmass ’86, article in the Physics News Section of the January, 1987 issue of Physics Today.


Scattering Theory in Quaternionic Quantum Mechanics and T-Violation, talk given at the Landau Memorial Conference on Frontiers of Physics, Tel Aviv, Israel (June 6-10, 1988), to appear in the Conference Proceedings.


Sakharov and Induced Gravitation, in the Sakharov Memorial Issue of Piroda, August 1990; to be reprinted by the American Institute of Physics in “Sakharov Remembered: A Tribute by Friends and Colleagues,” S. Drell and S. Kapitza, eds.


Algebra of Conserved Generators and Statistical Ensembles in Generalized Quantum Dynamics (with L.P. Horwitz), presented by L.P. Horwitz at the Workshop on Algebraic Approaches to Quantum Dynamics, May 7-12, 1995, at the Fields Inst. for Res. and Math. Sciences, Toronto, Ontario, Canada (to appear in the proceedings).


What Chiral Symmetry Teaches Us About Particle Properties, Dirac Prize lecture, June, 1999; to be published by the ICTP, Trieste.


Journal Articles and arXiv Postings

Theory of Valence Band Splittings at \( k = 0 \) in Zincblende and Wurtzite Structures. Phys. Rev. 126, 118 (1962).


Low Energy Theorem for $\gamma + \gamma \pi + \pi + \pi$ (with B.W. Lee, S.B. Treiman and A. Zee), Phys. Rev. D4, 3497 (1971).

Three Pion States in the $K_L \rightarrow \mu^+ \mu^-$ Puzzle (with Glennys R. Farrar and S.B. Treiman), Phys. Rev D5, 770 (1972).

Short Distance Behavior of Quantum Electrodynamics and an Eigenvalue Condition for $\alpha$, Phys. Rev. D5, 3021 (1972).


$I = \frac{1}{2}$ Contribution to $\nu_{\mu} + N \rightarrow \nu_{\mu} + \pi^0$ in the Weinberg Weak Interaction Model, Phys. Rev. D9, 229 (1974).


Application of Current Algebra Techniques to Neutral-Current-Induced Threshold Pion Production, Phys, Rev. Lett. 33, 1511 (1974).


Integration of Source-Charge Constraints in QCD with Fixed Quark and Antiquark Sources, Phys. Rev. D20, 3273 (1979).


Einstein Gravity as a Symmetry-Breaking Effect in Quantum Field Theory, Rev. Mod. Phys. 54, 729 (1982).


SU(4) Preonic Interpretation of the HERA Positron-Jet Events, IASSNS-HEP-97/12 (unpublished).


A Model for the Quark Mass and Flavor Mixing Matrices Based on Discrete Chiral Symmetry as the Origin of Families, (unpublished).

Model for Particle Masses, Flavor Mixing, and CP Violation, Based on Spontaneously Broken Discrete Chiral Symmetry as the Origin of Families, Phys. Rev. D59, 015012 (1999).


The Equilibrium Distribution of Gas Molecules Adsorbed on an Active Surface (with I. Mitra), IASSNS-HEP-00/11, physics/0003002, Phys. Rev. E62, 4386 (2000), Brief Reports.


Further Thoughts on Supersymmetric E8 as a Family and Grand Unification Theory, hep-ph/0401212.


Spherically symmetric vacuum solutions arising from trace dynamics modifications to gravitation (with Fethi Ramazanoğlu), arXiv:1308.1448, Int. J. Mod. Phys. D in press.

