
Curriculum Vitae and Publication List

TSUNG-SHUNG HARRY LEE

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1 Curriculum Vitae

NAME : Tsung-Shung Harry Lee

NATIONALITY : Citizen of the USA

ADDRESS : Physics Division

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DEGREES OBTAINED :

1973 - Ph.D. , University of Pittsburgh
1968 - M.S. , National Tsing-Hua University, Taiwan
1965 - B.S. , National Taiwan Normal University, Taiwan

EMPLOYMENT HISTORY :

1993 - Present : Senior Physicist, Argonne National Laboratory
1989 - 1994 : Head of Nuclear Theory Group, Argonne National Laboratory
1981 - 1992 : Physicist, Argonne National Laboratory
1977 - 1980 : Assistant Physicist, Argonne National Laboratory
1975 - 1977 : Research Associate, Argonne National Laboratory
1973 - 1975 : Research Associate, Bartol Research Foundation
1994 - 2000: Adjunct Professor, University of Pittsburgh

AWARDS :

1990 : Elected Fellow of the American Physical Society
1996 : Academia Sinica Professorship, K.C. Wong Education Foundation, China
1997 : RCNP Professorship, Center of Excellence Program of Japan
1998 : BBV Professorship, University of Valencia, Spain

PROFESSIONAL ACTIVITIES :

- Chair, Organizing Committee for 2004 Fall Meeting of Division of Nuclear Physics of American Physical Society, 2004
- Member, Program Committee of Division of Nuclear Physics of American Physical Society ,2002-2004
- Member, Executive Committee of Division of Nuclear Physics of American Physical Society ,2000-2002
- Member, International Advisory Committee of 13th -17th International Conference on Few-Body Problem, 1992 - 2003
- Member, Advisory Committee of 1st - 4th N^* Workshops, 1998 - 2003.
- Co-organizer, US-Japan Workshop on Chiral Dynamics, 2002 - 2004
- Co-chair, Scientific Program Committee of 16th International Conference on Few-Body Problem, 2000
- Member, Program Advisory Committee, Indiana University Cyclotron Facility, 2000
- Member, Program Advisory Committee for LEPS of Research Center for Nuclear Research, Osaka University, Japan, 1999
- Co-organizer, CEBAF/INT Workshop on N^* Physics, 1996
- Co-organizer, CEBAF Workshop on Amplitude Analyses, 1995
- Co-chair, Photonuclear Gordon Conference, 1994
- Member, Consultation Committee, Institute of Physics, Academia Sinica, Taiwan, 1994 - 2002
- Co-organizer, Topical Conference on Nuclear Chromodynamics, Argonne, 1988
- Co-organizer, International Symposium on Δ -Nucleus Dynamics, Argonne, 1983

Ph.D STUDENT SUPERVISION :

- W.-T. Chiang, University of Pittsburgh, 2001
- M. Pichowsky, University of Pittsburgh, 1996
- C. Fasano, University of Chicago, 1988
- S. Chakravati, University of Chicago, 1980

2 Publications

2.1 Recent publications 2001 - 2005

1. M. Matsui, T. Sato, and T.-S. H. Lee
Quark-Hadron Duality and Parity Violating Asymmetry of Electroweak Reactions in the Δ Region
Submitted Phys. Rev. C (2005); e-Print Archive: nucl-th/0010025
2. Y. Oh, K. Nakayama, T.-S. H. Lee
Pentaquark $\Theta^+(1540)$ Production in $\gamma N \rightarrow K\bar{K}N$
Submitted Phys. Rev. C (2005); e-Print Archive: hep-ph/0412363
3. T. Sato, T.-S. H. Lee, T. Nakamura
Leading-Order Corrections of a Dynamical Model for Electromagnetic Pion Production Reactions
Submitted Phys. Rev. C (2005); e-Print Archive: nucl-th/0411013
4. V. Burkert, T.-S. H. Lee
Electromagnetic Meson Production in the Nucleon Resonance Region
Int. J. Mod. Phys. E13, 1035 (2004)
5. Y. Oh, T.-S.H. Lee
 ρ Meson Photoproduction at Low Energies
Phys. Rev. C69, 025201 (2004)
6. W.-T. Chiang, B. Saghai, F. Tabakin, T.S.H. Lee
Dynamical Coupled-Channel Model of Kaon-Hyperon Interactions
Phys. Rev. C69, 065208 (2004)
7. W.Y.P. Hwang, T.S.H. Lee, Bo-Qiang Ma
A Replay of Few-Body Reactions in Particle Cosmology
Nucl. Phys. A737, 294 (2004)
8. Toru Sato, D. Uno, T.S.H. Lee
Dynamical Model of Weak Pion Production Reactions
Phys. Rev. C67, 065201 (2003)
9. A.I. Titov, T.S.H. Lee
Spin Effects and Baryon Resonance Dynamics in ϕ Meson Photoproduction at Few GeV
Phys. Rev. C67, 065205 (2003)
10. Bruno Julia-Diaz, T.S.H. Lee
Quark Exchange Mechanism of $\gamma d \rightarrow np$ Reaction at 2 - 6 GeV
Mod. Phys. Lett. A18, 200 (2003)
11. T.-S. H. Lee, R.P. Redwine
Pion Nucleon Interactions
Ann. Rev. Nucl. Part. Sci. 52, 23 (2002)

12. A.I. Titov, M. Fujiwara, T.S.H. Lee
Coherent ϕ and ω Meson Photoproduction from Deuteron and Nondiffractive Channels
Phys. Rev. C66, 022202 (2002)
13. A. I. Titov, T.S.H. Lee
Effective Lagrangian Approach to the ω Photoproduction Near Threshold
Phys. Rev. C66, 015204 (2002)
14. Y. Oh, T.S.H. Lee
One-Loop Corrections to ω Photoproduction Near Threshold
Phys. Rev. C66, 045201 (2002)
15. K. Nakayama, J. Speth, T.S.H. Lee
 η Meson Production in NN Collisions
Phys. Rev. C65, 045210 (2002)
16. D. Dutta, H. Gao, T.S.H. Lee
Study of Nucleon Resonances with Double Polarization Observables of Pion Photoproduction
Phys. Rev. C65 044619 (2002)
17. T. Sato, T.S.H. Lee
Dynamical Study of the Δ Excitation in $N(e, e'\pi)$ Reaction
Phys. Rev. C63, 055201 (2001)
18. Wen-Tai Chiang, F. Tabakin, T.S.H. Lee, B. Saghai
Coupled-Channel Study of $\gamma p \rightarrow K^+ \Lambda$ Reactions
Phys. Lett. B517, 101 (2001)
19. K. Hafidi, T.S.H. Lee
Dynamical Study of $d(e, e'\pi)$ Reaction
Phys. Rev. C64, 064607 (2001)
20. M. A. Hasan, J.P. Vary, T.-S. H. Lee
Medium Mass Nuclei with Δ Excitations Under Compression
Phys. Rev. C64, 024306 (2001)
21. C.-T. Hung, S.N. Yang, T.S.H. Lee
Meson Exchange πN Models in Three-Dimensional Bethe-Salpeter Formulation
Phys. Rev. C64, 034309 (2001)
22. H. Gao, T.S.H. Lee, V. Marinov
 $\phi - N$ Bound State
Phys. Rev. C63, 022201 (2001)
23. Y. Tzeng, S.Y. Tsay Tzeng, T.T.S. Kuo, T.-S. H. Lee
A Local Density Approximation Treatment for the Pauli Exclusion Operator in Hypernuclei
J. Phys. G26, 1765 (2001)

24. Y. Oh, A.I. Titov, T.S.H. Lee
Nucleon Resonances in ω Photoproduction
Phys. Rev. C63, 025201 (2001)
25. T.-S.H. Lee, R.B. Wiringa
Quantum Monte Carlo Calculations of Pion Scattering from Li
Phys. Rev. C63, 014006 (2001)

2.2 Selected Refereed Articles of 1973 - 2000 (71 in Total)

1. T.S.H. Lee, D.O. Riska (Cited 108 in SPIRES)
Short Range Exchange Contributions to the Cross Section for $pp \rightarrow pp\pi^0$ Near Threshold
Phys. Rev. Lett. 70, 2237 (1993)
2. T. Sato, T.S.H. Lee (Cited 104 in SPIRES)
Meson Exchange Model for πN Scattering and $\gamma N \rightarrow \pi N$ Reaction
Phys. Rev. C54, 2660 (1996)
3. S. Nozawa, B. Blankleider, T.S.H. Lee (Cited 74 in SPIRES)
A Dynamical Model of Pion Photoproduction on the Nucleon
Nucl. Phys. A513, 459 (1990)
4. T. Sato, T.S.H. Lee, F. Myhrer, K. Kubodera (Cited 63 in SPIRES)
Chiral Perturbation Theory and the $pp \rightarrow pp\pi^0$ Reaction Near Threshold
Phys. Rev. C56, 1246 (1997)
5. M.A. Pichowsky, T.S.H. Lee (Cited 61 in SPIRES)
Exclusive Diffractive Processes and the Quark Substructure of Mesons
Phys. Rev. D56, 1644 (1997)
6. M. Betz, T.S.H. Lee (Cited 55 in SPIRES)
Phenomenological Hamiltonian for pions, Nucleons, and Delta Isoabrs: Applications to the Pion Deuteron System
Phys. Rev. C23, 375 (1981)
7. T.P. Vrana, S.A. Dytman, T.S.H. Lee (Cited 52 in SPIRES)
Baryon Resonance Excitation from πN Data Using A Unitary Multichannel Model
Phys. Rept. 328, 181 (2000)
8. T. Yoshimoto, T. Sato, M. Arima, T.S.H. Lee
Dynamical Test of Constituent Quark Models with πN Reactions
Phys. Rev. C61, 065203 (2000)
9. V.G.J. Stoks, T.-S. H. Lee
Strange Hadron Matter and SU(3) Symmetry
Phys. Rev. C60, 024006 (1999)

10. Peng-Nian Shen, Yu-Bin Dong, Zong-Ye Zhang, You-Wen Yu , T.S.H. Lee **E2/M1 Ratio of the $\Delta \leftrightarrow \gamma N$ Transition within the Chiral Constituent Quark Model**
Phys. Rev. C55, 2024 (1997)
11. S.R. Beane, V. Bernard, T.S.H. Lee, Ulf-G. Meissner
Neutral Pion Photoproduction on Deuteron in Baryon Chiral Perturbation Theory to Order Q^4
Nucl. Phys. A618, :381 (1997)
12. M. Batinic, A. Svarc, T.S.H. Lee
Near Threshold η Production in Proton Proton Collisions
Phys. Scripta 56, 321 (1997)
13. M.A. Pichowsky, T.S.H. Lee
Pomeron Exchange and Exclusive Electroproduction of ρ Mesons in QCD
Phys. Lett. B379, 1 (1996)
14. S. Nozawa, T.S.H. Lee
Electroproduction of Pions on the Nucleon
Nucl. Phys. A513, 511 (1990)
15. T.S.H. Lee, A. Matsuyama
Unitary Meson Exchange πNN Models : NN and πd Elastic Scattering
Phys. Rev. C36, 1459 (1987)
Unitary Meson Exchange Calculation of $NN \rightarrow NN\pi$ Reaction
Phys. Rev. C34, 1900 (1986)
16. K. Ohta, M. Thies, T.S.H. Lee
Study of Two Nucleon Mechanism of Pion Absorption in Nuclei
Ann. Phys. (N.Y.) 163, 420 (1985)
17. T.-S. H. Lee
Meson Exchange Hamiltonian for NN Scattering Up to 1-GeV and Δ -Nucleus Dynamics
Phys. Rev. Lett. 50, 1571 (1983)
Meson Theory of Nucleon Nucleon Scattering up to 2-GeV
Phys. Rev. C29, 195 (1984)
18. T.-S. H. Lee, D. Kurath
Inelastic Pion Scattering for 1p-Shell Targets
Phys. Rev. C21, 1670 (1980)
19. A. Klein, T.-S. H. Lee
Derivation of Relativistic Three-Dimensional Formulation from the Bethe-Salpeter Equation
Phys. Rev. D10, 4308 (1974)
20. T.-S. H. Lee, F. Tabakin
Momentum-Space Study of Pion-Nucleus Inelastic Scattering
Nucl. Phys. A226, 253 (1974)