Curriculum Vitae

L.P. Horwitz, 2 June, 2008

Last name: HORWITZ First Names: Lawrence Paul

Birthdate: October 14, 1930

Education:

 $9/48\text{-}6/52,\,\mathrm{NYU}$ College of Engineering, Engineering Physics BSEP.

9/52-6/54, Harvard University, Physics, A.M.

6/54-2/57, Harvard University, Theoretical, Ph.D.

Major Research Interests:

Particle Physics, statistical mechanics, mathematical physics, theory of unstable systems, classical and quantum chaos, relativistic quantum mechanics,

quantum field theory, general relativity, representations of quantum theory on hypercomplex Hilbert modules, group theory and functional analysis, stochastic theories of irreversible quantum evolution.

Employment:

10/98-present Tel Aviv University, Particle Physics

Professor Emeritus

2004-present Research, Department of Physics, College of Judea and Samaria

8/72-10/98 Tel Aviv University, Particle Physics

Full Professor

9/91-9/2004 Bar Ilan University, Teaching and research

Full Professor (ext)

9/71-8/72 University of Geneva, Theoretical Physics

Visiting Professor

9/69-9/71 University of Denver, Theoretical Physics and

Mathematical Physics

Full Professor

9/66-9/69 University of Denver, Theoretical

Physics and Mathematical physics

Associate Professor

8/67-8/68 Tel Aviv University

Visiting Associate Professor

8/64-8/66 University of Geneva, Theoretical Physics

Research Associate
4/57-8/65 International Business Machines Corp.
Theoretical Physics and Mathematics
Staff Member
7/52-9/54 Pickard and Burns, Inc. Needham, Mass.

Frequent Visits, long and short term:

University of Texas at Austin, Ilya Prigogine Center for Statistical Mechanics and Complex Systems University of Geneva, Department of Theoretical Physics, CERN Geneva, Institute for Advanced Study, Princeton, N.J.

Scholastic Honors:

Consultant

Sigma Pi Sigma, Tau Beta Pi, Sigma Xi, Samuel F.B. Morse Medal 6/52, Summa cum laude, 6/52 (NYU), National Science Foundation Fellowship 52-53, Shell Oil Fellow 56-57, 3 issues Foundations of Physics in honor of 65 birthday (1996)[Foundations of Physics **26**, No. 12, 1575-1739 (1996); **27**, No. 1, 1-134 (1997); **27** No. 2, 135-332 (1997)]. Outstanding Referee APS 2008.

Society Membership:

American Physical Society (Particle Physics)
Swiss Physical Society
European Physical Society
International Association for Mathematical Physics
Israel Physical Society
International Quantum Structures Association
Association of Members of the Institute for Advanced Study (from 1990)
International Association for Relativistic Dynamics.

Editorial and Advisory:

International Advisory Committee, International Association for Mathematical Physics in Leipzig, 1991. Editorial Board, Foundations of Physics Letters

Conference Secretary and co-editor of Proceedings for VIII International Colloquium on Group Theoretical Methods in Physics, Kiriat Anavim, Israel, March 25-29 (Annals of the Israel Physical Society vol.3 (1980), A. Hilger, Bristol, 1980).

Organizer and Chairman, Session on Groups and Semigroups in the Description of Unstable Systems, VII International Colloquium on Group Theoretical Methods in Physics, Austin, Texas, Sept. 11-16, 1978 International Advisory Committee, Organizing Committee, Discrete Chaotic Dynamics (Denmark, 2000).

Editorial Board, Fundamental Theories of Physics, Kluwer Publishers

Panel of Assessors ARC, Australian National Funding DEET.

Editorial Board, Algebras, Groups and Geometry, Hadronic Journal, Hadronic Journal Supplement.

Standing Committee, International Association for Relativistic Dynamics

Chairman, Organizing Committee International Assosciation for Relativistic Dynamcs (IARD), 2000, Bar Ilan, Ramat Gan, Israel.

Chairman, Organizing Committee International Association for Relativistic Dynamcs (IARD) 2004, Saas-Fee, Switzerland, June 12-19 2004.

Chairman and Organizer, Session on Particle, Fields and Relativity, Israel Physical Society, Technion Dec. 9, 2004.

Organizing Committee, International Association for Relativistic Dynamics, Thessaloniki, Greece, June 22-26, 2008.

Ph.D. Students:

- 1. T.C. Guo 1971 Catholic University, Washington, D.C.
- 2. Stuart Raby, 1976, Ohio State University
- 3. Leah Mizrachi, 1978, Beer Sheva
- 4. Y. Lavie (Z"L), 1985 fell in Lebanon.
- 5. D. Sepunaru 1981, Industrial laboratory, Ashdod, Israel.
- 6. A Soffer, 1986, Professor of Mathematics, Rutgers.
- 7. S. Shashoua, 1986, Tel Aviv, industrial research
- 8. R.I. Arshansky, 1987 Jerusalem
- 9. Baruch Rosenstein, 1987, Professor of Physics, National Chiao Tung University, Hsinchu, Taiwan.
- 10. Jacob Levitan, 1988 (co-advisor with M. Kaveh), Bar-Ilan and

Professor at College of the Shomron, Ariel, Israel.

- 11. Alex Kovner, 1988, Fellow at Oxford University, University of Bristol.
- 12. R. Ashkenazy, 1999, M.I.T.Ben Gurion University, Desert Research (2004).
- 13. Ruben Faibish Ph.D. 2001, industrial research, Israel.
- 14. Y. Strauss 2001-2, University of Toronto, Rutgers University;

Mathematics Department, Hebrew University, from October 2003.Ph.D. 5 May 2004 (with Shmuel Nussinov).Ben Gurion University, Beer Sheva (2005).

- 15. D. Bar 2001-2
- 16. Ori Oron 2003 (with Shmuel Nussinov), Industrial research. Elta.
- 17. Leonid Burakovsky, Staff Member Los Alamos National Laboratory
- 18. Martin Land, Professor at Hadassah College, Jerusalem.
- 19. Nadav Shnerb (Ph.D. Bar Ilan)Professor, Bar Ilan University.

Present Doctoral Students

Doron Ludwin (with Amos Ori, Technion)

Idan Talshir

Igal Aharonovitch (Bar Ilan)

Jonathan Silman (with B. Reznik)

Students during visit 1967-68 co-advisor with Y. Ne'eman:

- A. Hirshfeld 1968 Dortmund
- Y. Achiman 1968 Heidelberg
- M. Gronau 1968 Technion, Haifa
- A. Kantorovich 1968, Tel Aviv University, History and Philosophy of Science.

Jointly with Yuval Ne'eman 1998-2000 Ofer Megged.Industrial and mathematics, Tel Aviv University