CURRICULUM VITAE

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Born: Baghdad, Iraq. Nationality: USA/Israel.

POSITIONS:

1989-present University of Connecticut:
Professor, 1994-
Visiting Associate Professor, 1989-1994,

1980-2015 Yale University:
Adjunct Professor, 1995-2015
Associate Professor, 1989-1994,
Assistant Professor, 1984-1989,
Lecturer and Associate Research Physicist, 1982-1984,
Research Staff Physicist, 1980-1982 (Post Doctorate Advisor: D.A. Bromley).

EDUCATION:

1974-1980 SUNY at Stony Brook:
Ph.D., Nuclear Physics, Feb. 1980, M.Sc., Nuclear Physics, 1976.
(Ph.D. Advisor - P. Braun Munzinger, also worked with A. Arima)

1970-1974 Hebrew University of Jerusalem:
B.Sc. Double major: Math and Physics, Minor: Music, graduated with honors (87%).

1967-1970 Israeli Defense Force:
Lieutenant, Commando, Severely wounded, Two-year Paralyses, March 6, 1970.

AWARDS AND HONORS:

2025 Fulbright US Scholar, Romania
2016 Outstanding Research Award, University of Connecticut.
Best Lecturer, Carpathian (CSSP16) Summer School, Romania.
2012-2014 Editor in Chief, Journal of Modern Physics (Resigned, June 1, 2014).
2013 Nuclear Physics A: One of the most valued reviewers, 2013.
1998 Fellow, American Physical Society.
1996 Best paper award, 1996, Japan Phys. Soc. [Jour. Phys. Soc. Jpn. **65**(1996)1256].
1995 Invited Eminent Professor Award, RIKEN, Japan.
1994 DNP/APS "1994 Dissertation award" to my graduate student Dr. Z. Zhao.
1974 The Hebrew Technical Institute, New York City, Two awards, Hebrew University.

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

American Physical Society, American Astronomical Society, International Astronomical Union, American Association for the Advancement of Science, The Connecticut Academy of Arts and Sciences, Sigma Xi, Yale Chapter. Sigma Pi Sigma, UConn Chapter.

SERVICE:

Reviewer: Nuclear Physics A, Physical Review, Physical Review Letters, European Physical Journal, Canadian Journal of Physics. USDOE, NSF, US-Israel Binational Science, U.S. Civilian Research and Development Foundation (CRDF).

Committees: program committee, Division of Nuclear Physics, APS, 1984-86. Chair, Organizing Committee, Baryons92, Yale University, 1-5 June, 1992. Int. Advisory Comm., Oaxtepec School, Mexico, 1999; Erice School, Italy, 2000, Wigner 8 Symposium, Group Theory 2005 conference. External Review Committe, CUNY, 1998. Nominated for Chair, NES/APS, 1999, Nominating Committee, NES/APS, 2000, Chair, Charge Particle Group, ELI-NP, TDR4, 2016, Nominating Committee LAD/AAS, 2018.

GUEST SCIENTIST, INVITED LECTURER, INTERNATIONAL COLLABORATION:
2007 Associate Faculty, TUNL at Duke University. 2000, Nov., Louvain-La-Neuve, Belgium, Invited Lecturer. 1999, Aug, Guanjuato, Mexico, Invited Lecturer. 1998, Nov-Dec., Louvain-La-Neuve, Invited Lecturer. 1996, July, November, GSI, Darmstadt, collaboration.1995, Nov-Dec., RIKEN, Invited Eminent Professor. 1994, August, RIKEN, Tokyo, Collaboration. 1993, November, Louvain-La-Neuve, Invited Lecturer. 1993, August, Seol, Korea, Invited Lecturer. 1993, September, Tinajin, China, Invited Lecturer. 1992, July, MSU E. Lansing, Collaboration. 1992, April, RIKEN, Japan, Collaboration. 1990, April, AGS-Brookhaven, test beam line. 1989, November, Weizmann Institute, Israel, Guest Scientist. 1989, August, TANDAR, Buenos Aires, Argentina, Guest Scientist. 1988, August, University of CT, Storrs, Collaboration. 1988, March, MIT-Bates Linear Accelerator, Collaboration. 1987, June, MSU, E. Lansing, Michigan, Collaboration. 1986, September, Daresbury, England, Collaboration. 1985, May, Legnaro, Italy, Collaboration. 1984, August, RIKEN, Tokyo, Guest Scien., May, GSI, Germany, Collaboration. 1982, August, Weizmann Institute, Israel, Collaboration.

TEACHING EXPERIENCE:

1994-present University of Connecticut: Introductory Astronomy and Introductory Physics Courses. Independent studies in theory of stellar evolution and the standard solar model. Research Advisor for Graduate Students. Research Advisor for Undergraduate Students.

1980-1994 Yale University: Nuclear physics, Laboratory and Graduate Lectures. General introductory course to undergraduate students. Research Advisor for Graduate Students. Research Advisor for Undergraduate Students.

1974-1980 SUNY at Stony Brook: Teaching Assistant.

RESEARCH EXPERIENCE:

1994-present University of Connecticut: Experimental Nuclear Physics, Director, Laboratory for Nuclear Science (http://astro.uconn.edu. Optical Readout Time Projection Chamber (O-TPC) detector.). Cryogenic Liquid Xenon TPC. Thick GEM Technology. Measurements in nuclear astrophysics with gamma-ray beams and with radioactive beams, reaction rates crucial for the standard solar model, stellar evolution, helium burning, and progenitor supernova. Measurements at intermediate energies, structure of baryons and QCD. Applied research on the production of radioisotopes, landmine detection and interstelar propulsion and Xenon TPC for Gamma-Camera for the detection of Special Nuclear Material (SNM).

1980-present Yale University: Experimental Nuclear physics: Neutron, Gamma and Charged particle spectroscopy, Scintillating Fibers and Electromagnetic Shower Counters. Precision experiments in Nuclear Astrophysics, Fundamental Symmetries in Nuclei, Parity Violation. Theoretical and experimental work on Broken Reflection Symmetry and Generalized Seniority. Study of Structure of Baryons.

1974-1980 SUNY, Stony Brook: Experimental Nuclear Physics, Gamma ray and Particle Spectroscopy, HI Scattering Resonances. Theoretical nuclear physics-Generalized Seniority. Worked with Professor Peter Braun-Munzinger (thesis advisor) and Professor Akito Arima (theory).

MILITARY RECORD, ISRAELI DEFENSE FORCE (UNCLASSIFIED):
Moshe Gai

August 1967	Drafted, volunteered to serve in commando patrol (sayeret) unit.
May 1969	Graduated from Officer's School, and School of Specialized Training in Navigation, Paratrooper and Desert Survival Skills.
March 1970	A commander of a patrol unit in the Suez Canal, rank Lieutenant. Experienced a direct hit from an Egyptian tank, critically wounded, suffered neck and shoulder injuries, severed nerves. Partially paralyzed left side (approximately two years).
May 1970	Medically and honorably discharged from the Israeli Defense Force.
1972-1973	While a student, served on several cultural-social exchange programs of the Israeli Defense Force, including visitation of Jewish Communities in Antwerp and Europe.
October 1973	While partially paralyzed in left arm, volunteered to serve as a liaison officer in the second (reserve) commanding bunker of the Suez Canal Zone during the "October War" with General (later Prime Minister) Yitzhak Rabin in the reserve commanding bunker of the "October war".