

## Contact

[www.linkedin.com/in/jamesrosenzweig](http://www.linkedin.com/in/jamesrosenzweig) (LinkedIn)  
[pbpl.physics.ucla.edu/](http://pbpl.physics.ucla.edu/) (Personal)

## Top Skills

Process Improvement  
Fundraising  
Science

## Languages

Italian

## Certifications

Duolingo French Fluency:  
Elementary (Estimated)

Duolingo French Fluency:  
Elementary (Estimated)

Duolingo Spanish Fluency:  
Advanced (Estimated)

Duolingo Spanish Fluency:  
Advanced (Estimated)

Duolingo Spanish Fluency:  
Advanced (Estimated)

## Publications

Calculation of Coherent Radiation from Ultra-short Electron Beams Using a Liénard-Wiechert Based Simulation Code

Ultrahigh brightness bunches from hybrid plasma accelerators as drivers of 5th generation light sources

Hybrid RF-Gun: Simulations and Cold Tests

Planar-Dielectric-Wakefield Accelerator Structure Using Bragg-Reflector Boundaries

Fabrication process for thick-film micromachined multi-pole electromagnets

## Patents

# James Rosenzweig

Co-director

Los Angeles, California, United States

## Summary

Specialties: Physics of intense particle beams; physics of advanced light sources -- free-electron lasers and Compton scattering sources; new acceleration techniques based on lasers, plasmas and wakefields; high power microwave devices; high average power accelerators; novel high-field magnets; beam measurement techniques at the fsec frontier; computational and theoretical physics methods in above areas. Commercialization of technologies arising from my lab program.

## Experience

UCLA Dept. of Physics and Astronomy

32 years 2 months

Distinguished Professor

January 1991 - Present (32 years 2 months)

United States

Professor of Physics, with wide research interests advanced accelerators, plasmas, and next-generation light source research. Director of UCLA Particle Beam Physics Laboratory, a research group engaged in advanced topics in above areas, with large on campus and external collaborations.

Chair

July 2010 - January 2015 (4 years 7 months)

RadiaBeam Technologies

20 years

Co-Founder

October 2003 - Present (19 years 5 months)

Advanced manufacturing and research for cutting edge particle accelerators

Owner; Chairman, Board of Advisors

2003 - Present (20 years)

Advanced technology firm serving the accelerator research, industrial and medical communities.

Method of testing electronic components

Method for Generating Electron Beams in a Hybrid Laser-Plasma Accelerator

Rayton

Director

January 2015 - Present (8 years 2 months)

Changing advanced semiconductor manufacturing with particle accelerators.n

INFN-LNF

19 years 8 months

Visiting Researcher

January 2003 - August 2022 (19 years 8 months)

Visiting Professor

January 2003 - July 2010 (7 years 7 months)

Meridian Advanced Technology Systems

Co-Founder

June 2010 - 2015 (5 years)

Start-up located in Rome, Italy, concentrated on accelerator and advanced materials technology.

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## Education

University of Wisconsin-Madison

BS, MS, PhD, Physics · (1978 - 1988)