

# Simon Asher Levin

Professor of Ecology and Evolutionary Biology  
Ph.D., University of Maryland, College Park, 1964



## Research Interests

Levin's principal interests are in understanding how macroscopic patterns and processes are maintained at the level of ecosystems and the biosphere, in terms of ecological and evolutionary mechanisms that operate primarily at the level of organisms. Much of my work is concerned with the evolution of diversification, the mechanisms sustaining biological diversity in natural systems, and the implications for ecosystem structure and functioning. The work integrates empirical studies and mathematical modeling, with emphasis upon how to extrapolate across scales of space, time and organizational complexity. The essential mathematical challenge is the development of macroscopic descriptions for the collective behavior of large and heterogeneous ensembles that are subject to continual evolutionary modification. Specific attention is directed to evolution and ecology of dispersal. Current systems of study include plant communities, as well as marine open-ocean and intertidal systems. In related work, I have been interested in the self-organization and evolution of strain structure in influenza A. In addition, I have been involved in the conservation implications of the basic ecological work, with emphasis on reserve design and on social and economic linkages.

## Areas of Expertise:

Ecology, Environmental Economics, Epidemics

## Contact Information

203 Eno Hall

Tel 609-258-6880

Fax 609-258-6819

slevin@princeton.edu

website: [http://www.princeton.edu/eeb/people/display\\_person.xml?netid=slevin&display=Faculty](http://www.princeton.edu/eeb/people/display_person.xml?netid=slevin&display=Faculty)