

Loomis Laboratory of Physics  
University of Illinois at Urbana-Champaign  
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# Nigel Goldenfeld

## Personal Information

Date of birth: 1 May, 1957  
Citizenship: USA

## Present Position

Swanlund Endowed Chair and Professor of Physics, University of Illinois at Urbana-Champaign

## Awards Received

Elected to National Academy of Sciences (2010)  
Elected to American Academy of Arts and Sciences (2010)  
Rosenqvist Lecturer, University of Oslo (2010)  
Swanlund Endowed Chair (2007 - present)  
Norman Hascoe Distinguished Lecturer, University of Connecticut (2008)  
Arthur O. Williams Lecturer, Brown University (2008)  
A.E. Nordsieck Award for Excellence in Graduate Teaching (2001)  
APS Centennial Speaker (1999)  
Elected Fellow of the American Physical Society (1995)  
National Science Foundation Creativity Award (1997)  
University Scholar of the University of Illinois (1994-1997)  
Alfred P. Sloan Foundation Fellow (1987-1991)  
Xerox Award for Junior Faculty Research (1991)  
Distinguished Visiting Lecturer, McMaster University (1989)  
Beckman Fellow at the Center for Advanced Study, Urbana (1988)  
Exhibitioner, Pembroke College (1976)

Numerous appearances on the University of Illinois Incomplete List of Teachers  
Ranked Excellent

## Professional Experience

2007-present	Swanlund Endowed Chair
2005 – present	Leader, Biocomplexity Theme, Institute for Genomic Biology
2003	Senior Visitor, DAMTP, University of Cambridge
1995 – present	Professor of Physics, University of Illinois
1996	Founder, NumeriX LLC
1991 – 1995	Associate Professor, University of Illinois
1985 – 1991	Assistant Professor, University of Illinois
1988	Visiting Scientist, Stanford University
1982 – 1985	Postdoc, Insititute for Theoretical Physics, Santa Barbara
1979 – 1982	Graduate student, Cavendish Laboratory, Cambridge
1976 – 1979	Undergraduate, Pembroke College, Cambridge
1976	Research Assistant, National Physical Laboratory, England

## Research Interests

Dynamics of pattern forming systems, multi-scale modeling, phase transitions kinetics, front propagation, turbulence, renormalization group theory for differential equations and singular perturbations, critical phenomena, disordered systems, high temperature superconductivity, polymers and liquid crystals, computational finance, biocomplexity

Research continually funded by the National Science Foundation since 1985, and by NASA and the US Department of Energy..

### **Additional professional activities**

Editorial Board of The Philosophical Transactions of the Royal Society (2009-present)  
 Member, APS Oliver E. Buckley Prize Committee (2009)  
 Editorial Board of Communications in Applied Mathematics and Computational Science (2008-present)  
 Reviewer, New directions for understanding systemic risk. (Fed Res. NY/NAS report, 2007)  
 Organiser, Program on Pattern Formation in Physics and Biology, KITP UC Santa Barbara, 2003.  
 International Advisory Committee, Renormalization Group 2000  
 Chair, APS Lars Onsager Prize Committee (1998)  
 Member, APS Lars Onsager Prize Committee (1997)  
 Editorial Board of International Journal of Theoretical and Applied Finance (1996-present)  
 International Advisory Committee, Renormalization Group 1996  
 APS Division of Fluid Dynamics Program Committee (1995)  
 US Dept. of Energy Applied Mathematics Panel (1992)

Reviewer for Science, Nature, Physical Review Letters and other journals; National Science Foundation, Department of Energy, US-Israel Binational Science Foundation and other government and private grant-awarding agencies.

14 students supervised to Ph.D, 17 postdocs

### **Education**

1979 – 1982 University of Cambridge, Cambridge, UK  
 Ph.D Theoretical Physics

- Advisor: Prof. Sir Sam Edwards, FRS
- Title: Statistical Mechanics of Polymers in the Solid State

1976 – 1979 University of Cambridge, Cambridge, UK  
 B.A. (Cantab) Natural Sciences

- Specialising in theoretical physics