

## BIOGRAPHICAL SKETCH: Sebastian Doniach

### Education

Christ's College, Cambridge (UK) 1951-54, Major Scholar in Natural Sciences.  
Cambridge Mathematics Tripos (B.A.) 1954.  
University College London 1954-55.  
Liverpool University, 1955-58; Ph.D. in Theoretical Physics 1958.

### Research and Professional Experience

1958-60 - ICI Fellow, University of Liverpool  
1960-64 - Lecturer in Physics, Queen Mary College (University of London).  
1964-66 - Lecturer in Physics, Imperial College (University of London).  
1967-68 - Visiting Research Associate, Physics Department, Harvard University.  
1967-69 - Reader in Theoretical Solid State Physics, University of London.  
1969-Present, Professor, Department of Applied Physics, Stanford University.  
1974- Visiting Scientist, Institut Laue Langevin, Grenoble (April/May).  
1975-6 - (Oct.-March); 1978, (Jan.-March); 1982, (Sept.-Dec.); 1985 (Jan. - March); and  
1978 - (Aug.-May) JSPS Visiting Professor, Institute for Solid State Physics, University of Tokyo.  
1980 - Sabbatical leave as CNRS Senior Visiting Scientist, University of Paris (Jussieu and Orsay) (Jan-July);  
1985 - Visiting Scientist, CEA Saclay, (Apr-June), 1987 (Sept.-Dec.), 1990 (Jan.-June), 1993 (Apr - July), 1997 (Sept.-Dec.).  
1987-1991, Consultant 1992-3 - Visiting Fellow, Advanced Studies Institute, Los Alamos National Laboratory.  
1990, 1993, 1995, 1997 - Visiting Scientist, Institut Pasteur, Paris.  
1990- (May) Professeur Invité, Université Pierre et Marie Curie, Paris.  
1992 - Present - Professor, SSRL faculty, Stanford Linear Accelerator Center, (changed to Dept. Photon Science, Sep. 2007).  
1994 - Present - Professor, Department of Physics (jointly with Applied Physics), Stanford University.  
1995 (June-July), Professeur Associé (Ministry of Education Visiting Foreign Professor) Université de Paris (Orsay).  
2003, 2005 - Prof Invité, Inst Pasteur, Paris

### Honors and Awards

Fellow, American Physical Society, 1985.  
Honorary Member, Aspen Center for Physics, 1992-present.  
Fellow, American Association for the Advancement of Science, 1995.  
Société Française de Physique - Membre d'honneur, 2000

### Service

1970-1985, Member, Editorial Board: *Journal of Low Temperature Physics*.  
1970-1986, Member, Editorial Board: *Journal Magnetism* and *Magnetic Materials*.  
1973-1978, Principal Investigator, National Science Foundation grant to support SSRL  
1973-1978, Director, Stanford Synchrotron Radiation Laboratory (SSRL).  
1978-1980, Consulting Director, Stanford Synchrotron Radiation Laboratory.  
1978-1985, Member, Board of Trustees and Corporation, Aspen Center for Physics, 1986-present, Honorary Member.  
1982-Present, Associate Editor, *Advances in Physics*.  
1985-1990, Member, Editorial Board: *Physical Review B*.  
1986-1990, Member, Advisory Board, Institute for Theoretical Physics, U.C. Santa Barbara.  
1989-1992, Co-chair SSRL Affiliated Faculty  
1989-1992, Member University of Chicago Review Panel for Materials Science Division, Argonne National Lab.  
1991-1993, Divisional Associate Editor, *Physical Review Letters*  
1992-1998, Chair, SSRL Faculty, Stanford Linear Accelerator Center  
1992, Member, Review Committee, Weizmann Institute for Science, Rehovot, Israel  
1993, Co-organizer, Workshop on Proteins and DNA, Inst. for Theoretical Physics, UC Santa Barbara, Jan.  
1993-Director, NATO Advanced Research Workshop on Statistical Mechanics and Proteins, June 1-5  
1994-Organizer, Workshop on Statistical Mechanics and Protein Structure, Aspen Center for Physics  
1996-Organizer, Workshop on Supramolecular Assemblies & Protein-Protein Interactions, Aspen Ctr for Physics  
1998-1999, 2003, Chair, Biophysics Program, Stanford University (Acting)

### Research Activities and Interests

1. Theory of cooperative phenomena: granular superconductors, heavy Fermi liquids, high temperature superconductivity, vortices in layered superconductors, phospholipid bilayers, protein and RNA folding;
2. Computer modelling of protein structure and kinetics;
3. Small angle x-ray diffraction from biological materials, time resolved studies of protein and RNA folding, DNA-protein complexes, amyloidogenesis, structural molecular biology of functional RNA's.