

# Ping Ao

<http://systemsbiology.sjtu.edu.cn/>

## Education

- 1983, B.S. in physics, Peking University, Beijing, PR China;
- 1985, M.A. in physics, University of Illinois at Urbana-Champaign, USA;
- 1990, Ph.D. in physics, University of Illinois at Urbana-Champaign, USA; PhD supervisor: [A.J. Leggett](#);
- 1994, Postdoc. in physics, University of Washington, Seattle, USA; Supervisor: [D.J. Thouless](#).

## Employment History

- 1994-2000 Department of Theoretical Physics, Umeå University, Umeå, SWEDEN;
- 2000-2003 Senior Research Scientist, Institute for Systems Biology, Seattle, USA;
- 2003 Visiting Associate Professor, Professor, Keck Graduate Institute, Claremont, USA;
- 2003-2009 Research Associate Professor, Department of Mechanical Engineering, University of Washington, Seattle, USA;
- 2008-Present Professor, Shanghai Center for Systems Biomedicine, Shanghai Jiao Tong University, Shanghai, China.

## Research

Prof. Ping Ao's research is interdisciplinary, ranging from biology, to engineering and physics. Both dry and wet approaches have been employed.

- In **(systems) biology**, his research consists of four major programs: cancer network dynamics, metabolism, evolutionary biology, and stochastic dynamics.
- In **physics**, research on condensed matter physics and non-equilibrium physics is still active.

Recently, his group has been developing a new method on stochastic differential equations, and have solved two fundamental problems in evolutionary biology; found the first generic construction of Lyapunov function in whole state space; and formulated a cancer dynamical and a kinetic metabolic pathway frameworks. The former was first proposed with Lee Hood and others.