## Shoucheng Zhang

Work Address

Department of Physics McCullogh Bldg. Stanford University Stanford, CA 94305-4045 (650) 723-2894 Home Address

684 San Juan Street Stanford, CA 94305 (650) 329-8566

sczhang@stanford.edu

## Research Interest

Theoretical condensed matter physics, including quantum spin Hall effect, topological insulators and superconductors, quantum spintronics, cuprate and pnictide superconductors, superfluidity and magnetism.

**Experience** ITP Santa Barbara

Santa Barbara, CA

1987-1989

Postdoctoral Research fellow at ITP UCSB.

IBM Almaden Research Center

San Jose, CA

1989-1993

Research Staff Member of IBM Research Division.

Stanford University

Stanford, CA

1993-2010

Professor of Physics.

Stanford University

Stanford, CA

 $1993\mathrm{-present}$ 

Professor of Applied Physics, by courtesy.

Stanford University

Stanford, CA

2004-present

Professor of Electrical Engineering, by courtesy.

Stanford University

Stanford, CA

2004-present

Co-director of the IBM Stanford center for spintronics.

Stanford University

Stanford, CA

2010-present

JG Jackson and CJ Wood Professor of Physics.

**Education** Free University of Berlin

Berlin, GERMANY

Diplom in Physics, June 1983.

SUNY at Stony Brook

Stony Brook, New York

Ph.D. in Physics, June 1987.

Honors Outstanding Young Researcher Award 1992 Awarded by the Oversea Chinese Physicist Association, selection committee members are Paul Chu, Steven Chu, Patrick Lee, T.D. Lee and C.N. Yang. Outstanding Innovation Award 1993 Awarded by the IBM Research Division. 2006 Fellow of the American Physical Society Awarded by the American Physical Society. 2007 Guggenheim Fellow Awarded by the John Simon Guggenheim Memorial Foundation. 2007 Science Top 10 Our work on the quantum spin Hall effect was recognized by Science Magazine as one of the top 10 breakthroughs among all scientific fields in 2007. Humboldt Research Prize 2009 Awarded by the Alexander von Humboldt Foundation of Germany. Gutenberg Research Award 2010 Awarded by the University of Mainz, Germany. Europhysics Prize 2010 Awarded by the European Physical Society. 2011 Outstanding Scientist Awarded by the Qiu-Shi Foundation and Chinese Association of Science. 2011 Election to the AAAS Membership of the American Academy of Arts and Sciences.

Oliver Buckley Prize 2012 Awarded by the American Physical Society.

Dirac Medal and Prize 2012 Awarded by the International Center for Theoretical Physics.

Physics Frontier Prize 2012 Awarded by the Fundamental Physics Prize Foundation.

**Publications** 220 papers published in refereed journals. 12 in Science, 12 in Nature and affiliated journals, 65 in the Physical Review Letters and two in the Review of Modern Physics. H-index=60.

**Conferences** Invited talks at 240 international conferences, workshops and colloquia, including the prestigious Einstein, Bohr and Ehrenfest colloquia, and plenary talks at some of the most prestigious international conferences.

Mentoring Ph. D. students and postdocs under my thesis supervision have become faculty members at the distinguished universities, including Xiaoliang Qi

and Sri Raghu at Stanford, Eugene Demler at Harvard, Andrei Bernevig at Princeton, Congjun Wu at UCSD, Jiangping Hu at Purdue, Leonid Pryadko at UC Riverside, Taylor Hughes at UIUC and Yaroslaw Bazaliy at the University of South Carolina.