

Professor Xiaoliang Qi (Department of Physics, Stanford University) is the winner of the 2010 Outstanding Young Researcher Award of the Overseas Chinese Physics Association (OCPA).

The OYRA is given each year to young ethnic Chinese physicists outside of Asia in recognition of their outstanding achievements in physics. The Award carries a total cash prize of US \$1,500 and a certificate citing the awardee's accomplishments in research.

Professor Qi received his B.S. degree in Fundamental Science in 2003 at Tsinghua University, Beijing. In 2007, he received his Ph.D. degree at the Center for Advanced Study, Tsinghua University, under the supervision of Prof. Zheng-Yu Weng. After that, he spent two and a half years as a Postdoctoral Research Associate in Prof. Shou-Cheng Zhang's group at Stanford University. In 2009, he joined the Department of Physics of Stanford University as an Assistant Professor. He is currently on leave for the academic year 2009-2010 and visiting Microsoft Station Q at University of California, Santa Barbara.

Professor Qi's current research focuses on topological phenomena in condensed matter physics. A few of his representative works are described below. He (and collaborators) developed a general topological field theory to describe topological insulators in generic dimensions and symmetry classes. Based on the topological field theory, he (and collaborators) predicted unique topological properties of the three-dimensional topological insulators, such as topological magneto-electric effect, an image monopole effect induced by a surface electron, and topological contribution to Faraday or Kerr effect. In another recent work, he (and collaborators) predicted a new family of topological insulators including Bi₂Se₃ and the other two compounds. These new materials have large gap and simple topological surface states, which are thus ideal systems for the study of topological phenomena. This new family of materials have attracted tremendous interest both experimentally and theoretically.

The winner of OCPA's 2010 OYRA Award was selected by the following panel of distinguished physicists (in alphabetical order):

Professor Moses Chan
Professor Lu Jeu Sham
Professor Frank Shu
Professor Ta-Liang Teng
Professor Xiao-gang Wen
Professor Moses Chan
Pennsylvania State University
University of California, San Diego
University of Southern California
Massachusetts Institute of Technology

Professor Linda Young Argonne National Laboratory

The OCPA award activity is a continuing program and represents a long tradition of OCPA to recognize outstanding achievements of the members of the ethnic Chinese physics community. Previous OYRA winners include:

Shou-Cheng Zhang (1992, Stanford University)
Terence Tai-Li Hwa (1993, UC San Diego)
Zhi-Xun Shen (1993, Stanford University)

Xiao-Gang Wen (1994, MIT)

Gang Xiao (1994, Brown University) Wai Mo Suen (1995, Washington University)

Hong Wen Jiang (1996, UCLA)

Rui Rui Du (1997, University of Utah) Zi Qiang Qiu (1997, UC Berkeley)

Nai-Chang Yeh (1998, California Institute of Technology)

Wayne Hu (1999, University of Chicago)
Chung-Pei Ma (2000, University of Pennsylvania)
Zhen Yao (2001, University of Texas)
Pengcheng Dai (2002, University of Tennessee)

Pengcheng Dai (2002, University of Tennessee)
Hoi-Kwong Lo (2002, University of Toronto)
Kun Yang (2002, Florida State University)
Hui Cao (2003, Northwestern University)

Jonathan Feng (2003, University of California at Irvine)

Luming Duan (2005, University of Michigan)
Cheng Chin (2006, University of Chicago)
W. Vincent Liu (2007, University of Pittsburgh)
Ho Bun Chan (2008, University of Florida)

Feng Wang (2008, University of California, Berkeley) Congjun Wu (2008, University of California, San Diego)

Chong-Yu Ruan (2009, Michigan State University) Dongping Zhong (2009, Ohio State University)