Yilong Han and Wang Yao won the 2014 Achievement in Asia Award (Robert T. Poe Prize)
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Professor Yilong Han of the Hong Kong University of Science and Technology (HKUST) and Professor Wang Yao of the Hong Kong University are the co-winners of the 2014 Achievement in Asia Award (AAA) (Robert T. Poe Prize) given by the International Organization of Chinese Physicists and Astronomers (OCPA).

The OCPA AAA (Robert T. Poe Prize) is awarded annually to a Chinese physicist/astronomer or a team working in Asia in recognition of their outstanding achievements in physics and astronomy. The Award carries a total cash prize of US $2,000 and a certificate citing the awardee's accomplishments in research.

Professor Yilong Han received his B.Sc. degree in physics from Peking University in 1998, and his Ph.D. degree in physics from the University of Chicago in 2003 under Professor David G. Grier. From 2004 to 2007, he worked as a postdoctoral fellow under Professor Arjun G. Yodh at the University of Pennsylvania. Since August 2007, he joined the physics faculty of the HKUST as an assistant professor. The best known research accomplishments of Professor Han to date involved the use of colloids to illuminate the solutions to three of the classical problems in crystal melting and glass transitions: (1) His research team was able to directly visualize the homogeneous melting dynamics through microscopic imaging of micron-sized spheres whose size can vary with temperature. (2) By using ellipsoidal colloidal particles to emulate anisotropic atoms in a glassy system upon cooling, his research team found a surprising two-step process in which the orientational motion is frozen first, forming an “orientational glass” state where there can still be translational diffusive motion, which is subsequently followed by a second transition upon further cooling where the translational motion is frozen as well. (3) His research team has also derived new insights into the melting mechanisms in thin crystalline films. They found that the melting mechanism was dependent on the film thickness; while very thin solid films were found to abruptly melt into the liquid phase, thicker films behaved more like conventional solids exhibiting traditional liquid-solid coexistence, with a critical thickness being four atomic layers.

Professor Wang Yao received his B.Sc. degree in 2001 from Peking University, China. From 2001 to 2006, he did his Ph.D. work under Professor Lu Sham in University of California, San Diego. His papers with Lu Sham *et al.* on theories of spin-photon interface and on spin decoherence and coherence controls in a spin bath have become significant contributions to the field of quantum spintronics. From 2006 to 2008, he worked as a postdoctoral researcher with Professor Qian Niu in University of Texas, Austin, where he made his initial finding together with Qian Niu *et al.* on the physical properties of valley pseudospin in graphene, which has become known as influential pioneering works in the field of valleytronics. Since he joined the University of Hong Kong as an assistant professor in September 2008, Professor Yao has established himself as a world leading theorist in the rapidly developing field of two-dimensional transition metal dichalicogenides. Yao made a number of important predictions on the physics of spin and valley pseudospin in two-dimensional transition metal dichalcogenides, which were subsequently verified by his experimental collaborators as well as many other

groups worldwide. Overall, his work has built a foundation for controlling valley pseudospin by electric, magnetic and optical means in two-dimensional materials of extensive current interest. In 2013, his accomplishments were recognized by the prestigious Croucher Innovation Award in Hong Kong, which carries a prize of five-million HKD for supporting his research.

The winners of the 2014 AAA (the Robert T. Poe Prize) were selected by following panel of distinguished physicists (in alphabetical order):

Professor Hongjun Gao	Institute of Physics, Chinese Academy of Sciences & University of Chinese Academy of Science
Professor Ting-Kuo Lee	Institute of Physics, Academia Sinica, Taiwan
Professor Zheng-Tian Lu	Argonne National Laboratory
Professor Wu-Tsung Weng	Brookhaven National Laboratory

OCPA's AAA activity is a continuing program and represents a long tradition of OCPA to recognize outstanding achievements of the members of the Chinese physics and astronomy community. Previous AAA winners include:

OU-YANG, Zhong-Can	(1993, Institute of Theoretical Physics, China)
ZHU, Qing-Shi	(1994, University of Science and Technology, China)
I, Lin	(1995, National Central University, Taiwan)
WEI, Ching-Ming	(1996, Academia Sinica, Taiwan)
CHING, Emily Shuk-Chi	(1999, Chinese University of Hong Kong)
WANG, Jian	(1999, University of Hong Kong)
CHAN, Che-Ting	(2000, Hong Kong University of Science & Technology)
HOU, Jian-Guo	(2001, University of Science & Technology, China)
YANG, Xue-Ming	(2001, Academia Sinica, Taiwan)
HOU, Wei-Shu	(2002, National Taiwan University, Taiwan)
WANG, Enge	(2002, Institute of Physics, CAS, China)
ZHANG, Jie	(2004, Institute of Physics, CAS, China)
LI, Baowen	(2005, National University of Singapore)
WANG, Ning	(2006, Hong Kong University of Science & Technology)
LI, Hsiang-nan	(2007, Academia Sinica, Taiwan)
GAO, Hongjun	(2008, Institute of Physics, CAS, China)
East Team	(2009, Institute of Plasma Physics, CAS, China)
MENG, Jie	(2009, Beijing University, China)
FENG, Dong-Lai	(2010, Fudan University, China)
WEN, Hai-Hu	(2010, Institute of Physics, CAS, China)
HO, Pei-Ming	(2011, National Taiwan University, Taiwan)
DAI, Xi	(2012, Institute of Physics, CAS, China)
FANG, Zhong	(2012, Institute of Physics, CAS, China)
JIA, Jin-Feng	(2013, Shanghai Jiao Tong University, China)
ZHOU, Xing-Jiang	(2013, Institute of Physics, CAS, China)