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Yi-Ping Huang

Field of Theoretical Condensed Matter Physics and Ultracold Atoms Physics

Education 2010-2012, M. S., Physics, University of Colorado at Boulder 2004-2008, B. S., Physics, National Tsing-Hua University (Taiwan)

Jhih-An Yang, Yi-Ping Huang, Michael Hermele, Tongfei Qi, Gang Cao, Dmitry Reznik, "High-energy electronic excitations in Sr₂IrO₄ observed by Raman scattering",

Phys. Rev. B 91, 195140, 2015

Yi-Ping Huang ,Gang Chen and Michael Hermele, "Quantum Spin Ices and Topological Phases from Dipolar-Octupolar Doublets on the Pyrochlore Lattice",

Phys. Rev. Lett. 112, 167203, 2014

Yi-Ping Huang and Daw-Wei Wang, "Quantum phase diagrams of fermionic dipolar gases in a planar array of one-dimensional tubes",

Phys. Rev. A 80, 053610, 2009

Honors, Taiwan Government scholarships for study abroad (16000USD/year), 2015
& awards Outstanding poster presentation of Annual Meeting of the Physics Society of
Republic of China, 2009

Conference/ Workshop presentations

Publications

"Quantum Spin Ices and Topological Phases from Dipolar-Octupolar Doublets on the Pyrochlore Lattice",

National Tsing-Hua University, Taiwan, 2015, seminar talk

"Quantum Spin Ices and Topological Phases from Dipolar-Octupolar Doublets on the Pyrochlore Lattice",

Spin-orbit Coupling and Magnetism in Correlated Transition Metal Oxides Workshop, Columbus, 2015, poster presentation

"Srongly spin-orbit coupled spin- $\frac{3}{2}$ model for $5d^1$ AB₂O₄ spinels", APS, Baltimore, 2013, oral presentation

"Quantum phase diagrams of fermionic dipolar gases in a planar array of onedimensional tubes",

Conference on Research Frontiers in Ultracold atoms (ICTP), Trieste, 2009, poster section

ities

Scientific activ- Boulder School for Condensed Matter and Materials Physics, "Modern Aspect of Superconductivity", Boulder, 2014

> Boulder School for Condensed Matter and Materials Physics, "Disorder and Dynamics in Quantum Systems", Boulder, 2013

> Princeton Summer School on Condensed Matter Physics, "Spin liquids, matrix product states and entanglement", Princeton, 2013

APS March Meeting, Baltimore, 2013

International Conference on Research Frontiers in Ultra-Cold Atoms, Trieste, 2009

Annual Meeting of the Physics Society of Republic of China, Taiwan, 2009 The topic program on Superconductivity and Magnetism at Nanoscale: Effects of quantum fluctuation and disorder, Taiwan, 2007

Teaching experience

General physics II PHYS1120, Recitation, Fall, 2010 General physics I PHYS1110, Recitation, Spring, 2011

Quantum mechanics I PHYS5250, Grader, Fall, 2011

Electrodynamics I PHYS7310, Grader, Fall, 2011

Quantum mechanics II PHYS5260, Grader, Spring, 2011

Thermal dynamics and Statistical mechanics PHYS4230, Grader, Spring, 2012

Theory of solid state II PHYS7450, Grader, Spring, 2015

Quantum Many Body Theory PHYS7250, Grader, Spring, 2015