

Workshop on spin-orbit coupled topological states

APCTP, Pohang, Korea | October 01 (Mon), 2018 ~ October 05 (Fri), 2018

This workshop is going to focus on the topic of topological states of matter in strongly correlated systems ranging from Mott insulators to unconventional superconductors. In the recent years, many attentions have been attracted to some new states of matter which are called topological phases of matter. These new phases exhibit an interesting manner, insulating in the bulk and as a conducting on the surface. Such states, which can be found in many compounds like spin liquids, transition metal oxides, non-centro symmetric superconductors, Half-Heusler compounds, Weyl semi metals as well as the heavy fermion systems are widely discussed. The goal of this meeting is to present the state of the art in experimental investigation and theoretical understanding of such systems. With the above goal we plan to have an exchange of ideas between experimental and theoretical approaches which are used to investigate the excited state, its relaxation, and in particular the interactions that mediate this relaxation in Mott insulators and High-Tc superconductors. Our goal is to bring together leading experimental and theoretical experts working in this field, and have open and constructive discussion about recent developments and open questions in this rapidly developing branch of experimental and theoretical condensed matter physics.

Organizers

Jeehoon Kim (POSTECH, Pohang)
Alireza Akbari (APCTP, Pohang)
Sungdae Ji (MPK, Pohang)
Alexei Andreev (IBS-PCS, Daejeon)

Advisory committee

Yunkyung Bang (POSTECH)
Jae Hoon Park (POSTECH)
Hyunwoo Lee (POSTECH)
Kwon Park (KIAS)
Ki-Seok Kim (POSTECH)
Taehwan Kim (POSTECH)
EunGook Moon (KAIST)

Local Committee

Suk Bum Chung (UOS)
Keun Su Kim (Yonsei)
Jungdae Kim (Ulsan)
Gil Ho Lee (POSTECH)
Gil Young Cho (POSTECH)

Confirmed Invited Speakers (To be Updated)

Ilya Eremin (Ruhr University Bochum)
Johannes Knolle (University of Cambridge)
Matteo Minola (MPIFKF)
Gang Chen (Fudan Univ.)
Hyeyoung Kee (Toronto Univ.)
Shik Shin (Tokyo Univ.)
Tanmoy Das (IISc)
Alexander Balatsky (LANL)
Liviu Hozoi (IFW)
Yuki Motome (Tokyo Univ.)
Shuang Jia (Peking Univ.)
Jian-Xin Zhu (LANL)
Ludovic Jaubert (Bordeaux Univ.)
Tien-Ming Chuang (SINICA)
Hyunsoo Kim (Maryland Univ.)
Yuji Matsuda (Kyoto Univ.)
Andreas Schnyder (MPI-FKF)
Shun-Qing Shen (Hongkong Univ.)
Tristan Cren (UPMC)
Yoshitero Maeno (Kyoto Univ.)
Takashi Oka (MPI-PKS)
Ryan Baumbach (NHMFL)
Daniel Leykam (IBS)
Chan-Ho Yang (KAIST)
SukBum Chung (Seoul City Univ.)
Han Yong Choi (SKKU)
Ara Go (IBS)
Tuson Park (SKKU)
Sung Bin Lee (KAIST)
EunGook Moon (KAIST)
BohmJung Yang (SNU)
Jae Hoon Kim (Yonsei Univ.)
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Bum Jun Kim (POSTECH)

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