

Advances in the Physics of Topological & Correlated Matter

September 19 Mon - 23 Fri, 2022

IBS Science Culture Center, Daejeon, Republic of Korea

Topology plays a pivotal role at the forefront in understanding correlated quantum matter. A plethora of relevant fields, e.g. topological superconductivity and magnetism, fractional Hall effect and spin liquids, non-equilibrium and open quantum systems, turn into exciting platforms to test our insights and to find new exotic states of matter. The main goal of this IBS-APCTP conference is to bring together experts from the above fields to get an overview of the current state and the most recent advances in understanding topological and correlated quantum matter.

Speakers

Aris Alexandradinata	USA	Roderich Moessner	Germany
Emil J. Bergholtz	Sweden	Franco Nori	Japan
Joseph Checkelsky	USA	Takashi Oka	Japan
Gil Young Cho	Korea	Andrew Pierce	USA
Riccardo Comin	USA	Frank Pollmann	Germany
Chen Fang	China	Masatoshi Sato	Japan
Nuh Gedik	USA	Mathias S. Scheurer	Austria
Jeongwan Haah	USA	Robert-Jan Slager	UK
Ryo Hanai	Korea	Dam T. Son	USA
Changyoung Kim	Korea	Ashvin Vishwanath	USA
Eun-Ah Kim	USA	Yayu Wang	China
Jun Sung Kim	Korea	Zhong Wang	China
Philip Kim	USA	Haruki Watanabe	Japan
Yong-Baek Kim	Canada	Benjamin J. Wieder	USA
Gil-Ho Lee	Korea	Binghai Yan	Israel
Daniel Leykam	Singapore	Andrea Young	USA

Themes / Topics

Fractional excitations and correlated phases

- Topological magnets
- Non-Hermitian systems
- Topological Floquet systems
- Non-Equilibrium dynamics
- Moire materials and topological flat bands
- Topological band theory
- Machine learning and topology

Online application deadline: August 14, 2022

Registration fee: 300,000 KRW (onsite) / 100,000 KRW (online)

Chairs

Yunkyu Bang	APCTP
Sergej Flach	IBS PCS
Tae Won Noh	IBS CCES
Han Woong Yeom	IBS CALDES

Local Organizers

Ki-Seok Kim	APCTP
Moon Jip Park	IBS PCS
Jung-Wan Ryu	IBS PCS
Bohm-Jung Yang	IBS CCES

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