

Flat bands and high-order Van Hove singularities

Intercontinental binodal Workshop 27th May – 7th June 2024

Band engineering and interaction effects of Van Hove points, flat bands, and topological structures attracts broad interest from different theoretical and experimental communities. This workshop will bring together experts with a common interest in these topics to stimulate discussions and ignite interactions between fields.

Topics include

- Van-Hove-like singularities
- Flat bands
- Topology and quantum geometry
- Fractional Chern insulators and topological insulators
- Strongly correlated materials

Invited speakers

Dresden

Eva Andrei (US)
Andrei Bernevig (US)
Elena Bascones (ES)
Anirudh Chandrasekaran (UK)
Andrey Chubukov (US)
Dmitry Efetov (DE)
Dmitriy Efremov (DE)
Vladimir Falko (UK)
Claudia Felser (DE)
Liang Fu (US)
Mark Greenaway (UK)
Francisco Guinea (ES)
Clifford Hicks (UK)
Nick Hine (UK)
Shahal Ilani (IL)
Atac Imamoglu (CH)
Phil King (UK)
Andrew Mackenzie (DE)

Walter Metzner (DE)
Christopher Mudry (CH)
Rahul Nandkishore (US)
Titus Neupert (CH)
Raquel Queiroz (US)
Andreas Rost (UK)
Nicolas Regnault (FR)
Manfred Salmhofer (DE)
Michael Scherer (DE)
Jörg Schmalian (DE)
Andreas Schnyder (DE)
Ronny Thomale (DE)
Peter Wahl (UK)
Thomas Weitz (DE)
Stephen Wilson (US)
Xiaodong Xu (US)
Ali Yazdani (US)
Gertrud Zwirnagl (DE)

Daejeon

Alexei Andreanov (KR)
Gil Young Cho (KR)
Xi Dai (HK)
Carlo Danieli (IT)
Jeil Jung (KR)
Mikito Koshino (JP)
Vic K T Law (HK)
Pilkung Moon (CN)
Tomoki Ozawa (JP)
Moon Jip Park (KR)
Jun-Won Rhim (KR)
Auditya Sharma (IN)
Young Woo Son (KR)
Youichi Yanase (JP)
Bo Yang (SG)

Scientific coordinators (Dresden node)

Laura Classen
MPI for Solid State
Research Stuttgart, Germany

Claudio Chamon
Boston University, USA

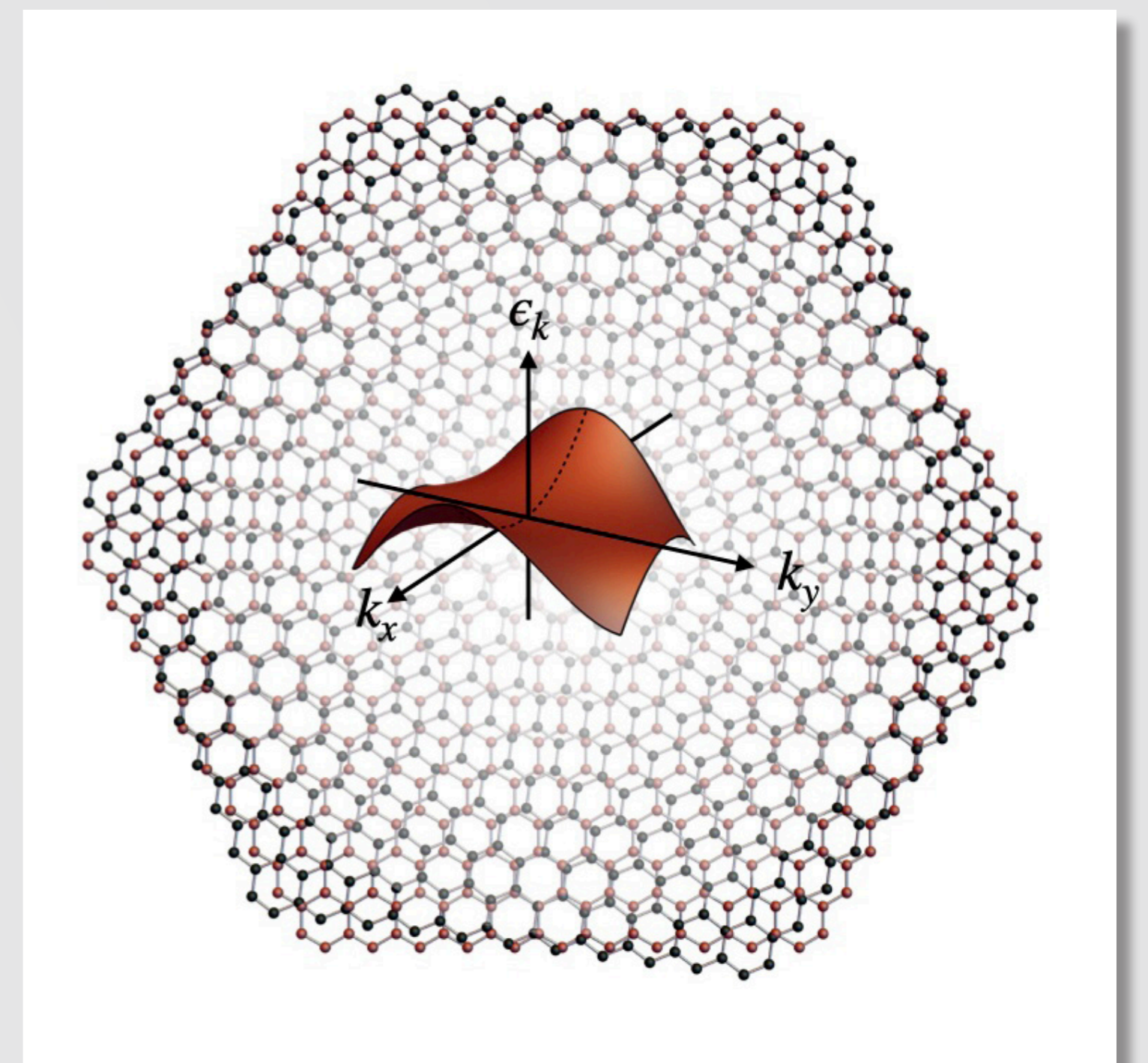
Joseph Betouras
Loughborough
University, UK

(Daejeon node)
Bohm-Jung Yang
Seoul National
University, Korea

Sergej Flach
IBS Center for Theoretical
Physics of Complex Systems,
Daejeon, Korea

Organisation:

Anna Anastasiou
MPI PKS, Germany
Gileun Lee
IBS PCS, Korea



Deadline for registration is March 31st, 2024.

Participation is possible from either node: MPI PKS Dresden or IBS-PCS Daejeon

Participants are encouraged to consider the environmental footprint and to attend from the geographically closer node.

For participation from Dresden please visit:
www.pks.mpg.de/fb-vhs24

For participation from Daejeon please visit:
https://pcs.ibs.re.kr/PCS_Workshops/PCS_FB-VHS24_Home.html

For further information please contact: Dresden node

Visitors Program – Anna Anastasiou
Max-Planck-Institute for the Physics of Complex
Systems Dresden, Germany
fb-vhs24@pks.mpg.de

Daejeon node

Visitors Program – Gileun Lee
Institute for Basic Science - Center for Theoretical
Physics of Complex Systems Daejeon, Korea
pcs@ibs.re.kr

MAX PLANCK
GESELLSCHAFT



ibs Institute for Basic Science

