

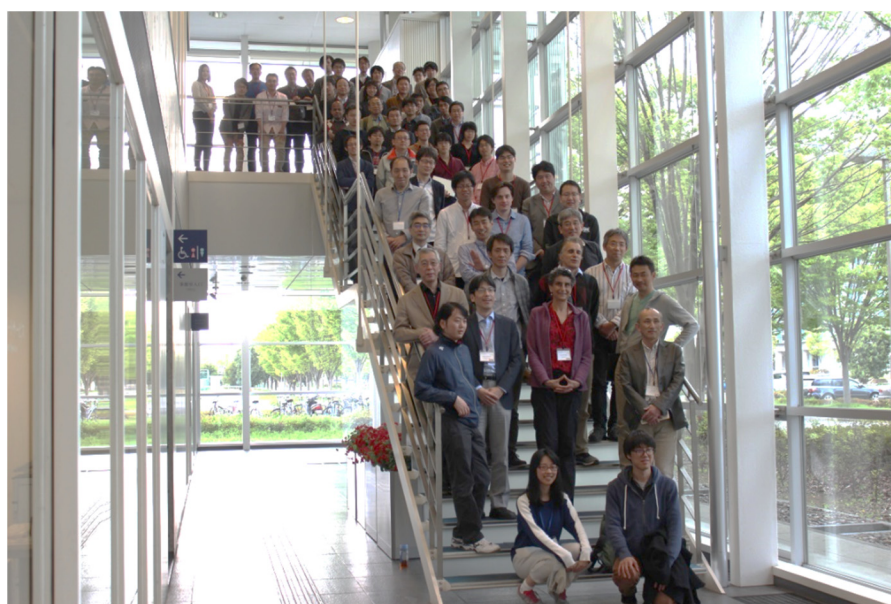
る3件の発表が行われ、反強磁性金属における電流誘起磁化(北海道大学、網塚浩氏)、多極子秩序の分類学と電磁応答(京都大学、柳瀬陽一氏)、量子スピントロニクスと応用(東大物性研、三輪真嗣氏)について報告がなされました。

全講演終了後、中辻知氏から閉会の挨拶、ならびにポスター賞審査委員長の瀧川仁氏(東大物性研)からポスター賞の発表があり、野口亮氏(東大物性研)、近江毅志氏(東大新領域)、西川尚氏(東大物性研)の3名に賞状と記念品のマグカップが贈呈されました。

最後に、年度始めのお忙しい時期での開催となりました

が、多数の皆様にご出席いただき誠にありがとうございました。2日間という過密なスケジュールでしたが、休憩時間にも随所で議論が行われ、多極子とトポロジーに関連した最新の研究成果について、濃密な情報共有と意見交換をしていただけたのではないかと思います。

当日の様子を撮影した写真が、本ワークショップWebサイト(<http://satoru.issp.u-tokyo.ac.jp/ISSPWorkshop20180409.pdf>から「Photo」をクリック)にありますので、是非ご覧ください。



Program

April 9th (Mon)

Opening [Chair] Masaki Oshikawa (ISSP)

- 09:00~09:05 Masaki Oshikawa (ISSP)
- 09:05~09:15 Hatsumi Mori (ISSP)
- 09:15~09:25 Hisatomo Harima (Kobe Univ.)

Session 1 Topological Phases [Chair] Masaki Oshikawa (ISSP)

- 09:25~09:55 SmB₆: Strange insulator: a superdielectric with a Fermi surface
Piers Coleman (Rutgers Univ.)
- 09:55~10:25 Chiral electromagnetism in Weyl/Dirac superconductors
Satoshi Fujimoto (Osaka Univ.)
- 10:25~10:45 Coffee Break



Session 2 Weyl Magnets [Chair] Satoshi Fujimoto (Osaka Univ.)

- 10:45~11:15 Divergent nonlinear optical responses in Weyl semimetals
Ying Ran (Boston College)
- 11:15~11:45 Observation of magnetic Weyl state by angle-resolved photoemission spectroscopy
Takeshi Kondo (ISSP)
- 11:45~12:15 Large spontaneous electrical, thermal, and optical responses in the Weyl antiferromagnet Mn_3Sn
Tomoya Higo (ISSP)
- 12:15~13:00 Lunch
- 13:00~14:30 Poster

Session 3 Multipole Physics [Chair] Premi Chandra (Rutgers Univ.)

- 14:30~15:00 Itinerant Multipole Orders in the spin-orbit-coupled metal $Cd_2Re_2O_7$
Zenji Hiroi (ISSP)
- 15:00~15:30 Non-Fermi liquid behaviors due to possible two-channel Kondo effect in non-Kramers doublet system
Takahiro Onimaru (Hiroshima Univ.)
- 15:30~16:00 Effects of magnetic field on the ferro-quadrupole order in $PrTi_2Al_{20}$
Masashi Takigawa (ISSP)
- 16:00~16:30 Coffee Break

Session 4 Strange Metal [Chair] Piers Coleman (Rutgers Univ.)

- 16:30~17:00 Synchrotron-Radiation-based ^{174}Yb Mössbauer spectroscopic studies on valence fluctuating $YbAlB_4$
Hisao Kobayashi (Univ. of Hyogo)
- 17:00~17:30 The high temperature antiferromagnetism in Kondo insulator $\alpha-YbAl_{1-x}Mn_xB_4$
Shintaro Suzuki (ISSP)
- 17:30~18:00 Giant magnetoresistance in Kondo superlattice
Yasuhiro Tada (ISSP)
- 19:00~ Dinner

April 10th (Tue)

Session 5 Quantum Spin Liquid [Chair] Masashi Takigawa (ISSP)

- 09:00~09:30 Majorana quantization and half-integer thermal quantum Hall effect in a Kitaev spin liquid
Yuichi Kasahara (Kyoto Univ.)
- 09:30~10:00 Emergent $SU(4)$ symmetry and quantum spin-orbital liquid $\alpha-ZrCl_3$
Masahiko Yamada (ISSP)
- 10:00~10:30 Universal thermal Hall conductivity of a kagome antiferromagnet
Minoru Yamashita (ISSP)
- 10:30~10:50 Coffee Break

Session 6 Strongly Correlated Multipoles [Chair] Toshiro Takabatake (Hiroshima Univ.)

- 10:50~11:20 Hidden Orders in Rare Earth and Actinide Materials
Premi Chandra (Rutgers Univ.)
- 11:20~11:50 Multipole ordering in PrV₂Al₂₀ studied by thermal expansion and magnetostriction
Akito Sakai (ISSP)
- 11:50~13:00 Lunch

Session 7 Novel Superconductivity [Chair] Youichi Yanase (Kyoto Univ.)

- 13:00~13:30 Tuning re-entrant superconductivity and Fermi surface instabilities in ferromagnetic superconductors
Dai Aoki (Tohoku Univ.)
- 13:30~14:00 High-pressure tuning of the quadrupole order and superconductivity in PrTr₂Al₂₀ (Tr = Ti, V)
Kazuyuki Matsubayashi (Univ. of Electro-Commun.)
- 14:00~14:30 Nematic order and BCS-BEC crossover in iron-chalcogenide superconductors
Takasada Shibauchi (Univ. of Tokyo)
- 14:30~15:00 Coffee Break

Session 8 Multipole Spintronics & Current Driven Phenomena [Chair] Satoru Nakatsuji (ISSP)

- 15:00~15:30 Current-Induced Magnetization in Antiferromagnetic Metals
Hiroshi Amitsuka (Hokkaido Univ.)
- 15:30~16:00 Classification theory of multipole order and emergent responses
Youichi Yanase (Kyoto Univ.)
- 16:00~16:30 Quantum spintronics for application
Shinji Miwa (ISSP)
- 16:30~16:40 Closing
Satoru Nakatsuji (ISSP)

