



Topological Quantum Phenomena in Condensed Matter with Broken Symmetries

Grant-in Aid for Scientific Research on Innovative Areas from MEXT

The 5th Intensive-Interactive Meeting (at Osaka City University Umeda Satellite) “Order parameters of spin-triplet superfluids / superconductors”

July 1 (Fri.) – 2 (Sat.), 2011

July 1, 2011

10:00~10:10 Opening

Concept of intrinsic angular momentum (10:10~12:30) *Chair O. Ishikawa*

10:10~11:25 “Intrinsic angular momentum and magnetic moment in chiral Fermi superfluids”
Kazumasa Miyake (Osaka Univ.)

11:25~12:05 “Intrinsic angular momentum of superfluid $^3\text{He-A}$ phase”

Takeo Takagi (Fukui Univ.)

12:05~12:30 Free discussion

12:30~13:30 Lunch

Texture and intrinsic angular momentum in superfluid $^3\text{He-A}$ Phase

(13:30~15:20) *Chair Y. Maeno*

13:30~14:30 “Investigation of Intrinsic Angular Momentum of superfluid $^3\text{He-A}$ Phase”
Osamu Ishikawa (Osaka City Univ.)

14:30~15:00 “Quasi-classical theory of the Mermin-Ho Texture in a Cylinder”
Katsuhiko Nagai (Hiroshima Univ.)

15:00~15:20 Free discussion

15:20~15:50 Coffee Break

Chiral edge electric current in Sr_2RuO_4 and edge mass current in superfluid ^3He

1st half (15:50~17:20) *Chair K. Miyake*

15:50~16:50 “Edge States and Edge Currents in Sr_2RuO_4 ”
Yoshiteru Maeno (Kyoto Univ.)

16:50~17:20 “Rough Surface(Boundary) effect on the 2-D k_x+ik_y Superconductor”
Katsuhiko Nagai (Hiroshima Univ.)

2nd half (17:20~18:40) *Chair R. Nomura*

17:20~17:50 “Edge states of Sr_2RuO_4 ” Satoshi Kashiwaya (*AIST)
17:50~18:20 “Angular momentum by edge mass current in superfluid $^3\text{He A-phase}$ ”
Yasuo Tsutsumi (Okayama Univ.)

18:20~18:40 Free discussion

19:00~ Dinner

July 2 2011

Direction of d-vector in anisotropic superconductor

(10:00~12:30) *Chair S. Higashitani*

10:00~10:50 “d-vector in Sr_2RuO_4 from Knight-shift measurements”

Kenji Ishida (Kyoto Univ.)

10:50~11:40 “NMR studies of odd-parity superconductors UPt_3 and UBe_{13} ”

Hideki Tou (Kobe Univ.)

11:40~12:10 “Gap structure of UPt_3 determined by the angle-resolved thermal conductivity measurements” Hiroshi Machida (**TIT)

12:10~12:30 Free discussion

12:30~13:30 Lunch

Half-quantum vortices in anisotropic superconductor and superfluid

(13:30~15:30) *Chair S. Kashiwaya*

13:30~14:20 “Half-integer quantum vortex in the spin-triplet superconductor”

Shingo Yonezawa (Kyoto Univ.)

14:20~15:10 “Half-quantum vortices in spin-triplet p-wave superfluids”

Takeshi Mizushima (Okayama Univ.)

15:10~15:30 Free discussion

15:30~ Closing

*AIST is “Advanced Industrial Science and Technology”

**TIT is “Tokyo Institute of Technology”