J-Physics 2019 International Conference & KINKEN-WAKATE 2019 Multipole Physics

KINKEN-WAKATE 2019 Tutorial Session : Sep. 17, 13:00 – Sep. 18, 11:15

J-Physics 2019 International Conference : Sep. 18, 13:00 – Sep. 21, 12:30

Centennial Hall (Rokko Hall), Kobe University

(Rokkodai 1-1, Nada-ku, Kobe 657-8501 Japan)

Sep 17 (Tue)

KINKEN-WAKATE Opening

13:00 – 13:05			Opening remarks

Tutorial Session

13:05 – 14:05	Tut1	Jean-Pascal Brison *Univ. Grenoble Alpes, CEA, Pheliqs*	p-wave superconductivity in uranium based systems
14:05 – 14:15	Short Break		
14:15 – 15:15	Tut2	Anne de Visser *University of Amsterdam*	Topological insulators and superconductors
15:15 – 15:25	Short Break		
15:25 – 16:25	Tut3	Satoru Hayami *Hokkaido University*	Augmented multipoles and cross-correlated couplings
16:25 – 17:40	Short presentation by students		
18:00 – 20:00	Get together (J-Physics 2019 & KINKEN-WAKATE)		

Sep 18 (Wed)

9:00 – 10:00	Tut4	Ilya Sheikin *LNCMI, CNRS*	Experimental techniques in high magnetic field
10:00 – 10:15	Short Break		
10:15 – 11:15	Tut5	Harald O. Jeschke *Okayama University*	Ab initio calculations for strongly correlated electron systems

J-Physics 2019 Opening

13:00 – 13:10			Opening remarks

EuPtSi, Skyrmion, Yb-system

13:10 – 13:40	Wp11	Catherine Pappas *Delft University of Technology*	Novel low temperature spiral and skyrmionic states
13:40 – 14:00	Wp12	Yoshichika Onuki *University of the Ryukyus*	Single crystal growth and unique electronic states of cubic chiral EuPtSi and related compounds
14:00 – 14:20	Wp13	Koji Kaneko *Japan Atomic Energy Agency*	Skyrmion lattice in f-electron magnet EuPtSi: neutron scattering study

14:20 – 14:40	Wp14	Chihiro Tabata *Kyoto University*	Resonant X-ray scattering study of magnetic order in chiral antiferromagnet EuPtSi
14:40 – 14:55	Wp15	Shigeo Ohara *Nagoya Institute of Technology*	Magnetotransport properties of heavy-fermion and chiral magnet $YbNi_3Al_9$
14:55 – 15:15	Wp16	Takeshi Matsumura *Hiroshima University*	Chiral soliton lattice formation in $Yb(Ni_{1-x}Cu_x)_3Al_9$

15:15 – 15:45 Coffee Break

1-2-20 System

15:45 – 16:15	Wp21	Sung Bin Lee *KAIST*	Field effect of multipolar order and superconductivity
16:15 – 16:45	Wp22	Atsushi Tsuruta *Osaka Univ.*	Non-Fermi liquid behaviors in two-channel Anderson impurities and lattice model
16:45 – 17:05	Wp23	Yu Yamane *Hiroshima University*	Non-fermi liquid behaviors in diluted $4f^2$ systems $Y(Pr)T_2Zn_{20}$ (T = Ir and Co)
17:05 – 17:25	Wp24	Tatsuya Yanagisawa *Hokkaido University*	Logarithmic elastic response in the dilute non-Kramers system $Y_{1-x}Pr_xIr_2Zn_{20}$

Sep 19 (Thu)

Solid State Chemistry and New Materials

9:00 – 9:30	Ta11	Yanpeng Qi *School of Physical Science and Technology,ShanghaiTech University*	Pressure-induced superconductivity and topological quantum phase transitions in topological materials
9:30 – 9:50	Ta12	Yoshihiko Okamoto *Nagoya University*	Superconductivity in PtSbS with noncentrosymmetric and cubic crystal structure
9:50 – 10:10	Ta13	Hiroyuki Yoshida *Hokkaido University*	Application of hydrothermal technique to develop 3d transition metal compounds without local inversion symmetry
10:10 – 10:25	Ta14	Kosmas Prassides *Osaka Prefecture University*	Emergent electronic phenomena in hybrid f-/p-electron molecular materials

10:25 – 10:55 Coffee Break

Augmented Multipole I

10:55 – 11:15	Ta21	Satoru Hayami *Hokkaido University*	Momentum-dependent spin splitting by collinear antiferromagnets without atomic spin-orbit coupling
11:15 – 11:35	Ta22	Tomoya Higo *ISSP, University of Tokyo*	Large spontaneous responses induced by ferroic order of cluster magnetic octupoles in Mn_3Sn
11:35 – 11:55	Ta23	Yuki Yanagi *Institute for Materials Research, Tohoku University*	Spontaneous inversion symmetry breaking by electric toroidal quadrupole ordering in $Cd_2Re_2O_7$
11:55 – 12:10	Ta24	Masashi Takigawa *ISSP, University of Tokyo*	Noncentrosymmetric phases in the spin-orbit coupled metal $Cd_2Re_2O_7$: Cd-NMR
12:10 – 12:25	Ta25	Changle Liu *Fudan University*	Detecting hidden order in frustrated magnets

12:25 – 13:30 Lunch Break

Miscellaneous Interesting Topics

13:30 – 14:00	Tp11	Toni Helm *Helmholtz-Zentrum Dresden-Rossendorf*	Pulsed magnetic field, high pressure and FIB microstructures - a powerful combination for studies of unconventional metals
14:00 – 14:30	Tp12	Yejun Feng *Okinawa Institute of Science and Technology Graduate University*	Direct observation of continuous all-in-all-out quantum phase transition under pressure
14:30 – 14:50	Tp13	Noriaki Kimura *Tohoku University*	Orbital crossing and magnetic breakdown in noncentrosymmetric metals
14:50 – 15:10	Tp14	Ryuji Higashinaka *Tokyo Metropolitan University*	Unconventional strongly correlated electronic states induced by multiple degrees of freedom in cubic Sm compounds
15:10 – 15:25	Tp15	Ryousuke Shiina *University of Ryukyus*	Theory of valence fluctuation and magnetic ordering in nearly trivalent Eu compounds

15:25 – 16:55 Pxx (xx : odd number) Poster I

Sep 20 (Fri)

UTe_2 I

9:00 – 9:30	Fa11	Sheng Ran *University of Maryland & NIST*	Unusual superconducting state in nearly ferromagnetic compound UTe_2
9:30 – 10:00	Fa12	Georg Knebel *Univ. Grenoble Alpes and CEA Grenoble*	Field enhancement of superconductivity close to the metamagnetic transition in UTe_2
10:00 – 10:20	Fa13	Kenji Ishida *Kyoto University*	NMR studies on U-based superconductors

10:20 – 10:50 Coffee Break

UTe_2 II

10:50 – 11:10	Fa21	Atsushi Miyake *ISSP, The University of Tokyo*	Metamagnetism in heavy fermion superconductors UTe_2
11:10 – 11:25	Fa22	Daniel Braithwaite *Univ. Grenoble Alpes and CEA Grenoble*	The nearly ferromagnetic superconductor UTe_2 under pressure
11:25 – 11:40	Fa23	William Knafo *LNCMI/CNRS, Toulouse, France*	Investigation of metamagnetism and reentrant superconductivity in UTe_2 by resistivity under intense pulsed magnetic field
11:40 – 11:55	Fa24	Jun Ishizuka *Kyoto University*	Insulator-metal transition and odd-parity topological superconductivity in UTe_2
11:55 – 12:10	Fa25	Suguru Hosoi *Osaka University*	Thermal conductivity measurements of the UTe_2 superconductor

12:10 – 13:10 Lunch Break

Exotic Superconductivity I

13:10 – 13:40	Fp11	Clifford W. Hicks *Max Planck Institute for Chemical Physics of Solids*	An evaluation of chiral superconductivity in Sr_2RuO_4
13:40 – 14:05	Fp12	Shunichiro Kittaka *ISSP, University of Tokyo*	Thermodynamic study of the superconducting gap structure of Sr_2RuO_4

14:05 – 14:30	Fp13	Shingo Yonezawa *Graduate School of Science, Kyoto University*	Probing and tuning of nematic superconductivity in doped Bi_2Se_3 superconductors

14:30 – 14:40 Short Break

Augmented Multipole II

14:40 – 15:10	Fp21	Di Xiao *Carnegie Mellon University*	Theory of magnetoelectric multipoles and its application in transport and optical effects
15:10 – 15:30	Fp22	Motoi Kimata *Institute for Materials Research, Tohoku University*	Magnetic spin Hall effects in a non-colinear antiferromagnet
15:30 – 15:45	Fp23	Shinji Watanabe *Kyushu Institute of Technology*	Charge transfer effect under odd-parity crystalline electric field: divergence of magnetic toroidal fluctuation in β-$YbAlB_4$

15:45 – 17:15 Pyy (yy: even number) Poster II

19:00 – 21:00 Banquet

Sep 21 (Sat)

Magnetic Multipoles

9:00 – 9:20	Sa11	Gaku Motoyama *Shimane University*	Magnetoelectric effect in antiferromagnetic ordered state of Ce_3TiBi_5 with Ce zig-zag chains
9:20 – 9:40	Sa12	Akinari Koriki *Hokkaido University*	Observation of magnetoelectric effect in antiferromagnetic metal $CeRu_2Al_{10}$
9:40 – 10:00	Sa13	Yuki Shiomi *University of Tokyo*	Observation of a magnetopiezoelectric effect in the antiferromagnetic metal $EuMnBi_2$
10:00 – 10:20	Sa14	Kenya Ohgushi *Tohoku University*	Ferroic order of magnetic quadrupoles in $BaMn_2As_2$
10:20 – 10:40	Sa15	Hikaru Watanabe *Department of Physics, Kyoto University*	Classification of multipole order: candidates and application to emergent responses

10:40 – 11:10 Coffee Break

Exotic Superconductivity II and More

11:10 – 11:25	Sa21	Shintaro Hoshino *Saitama University*	Unconventional full-gap superconductivity in Kondo lattice with semi-metallic conduction bands
11:25 – 11:40	Sa22	Kazumasa Miyake *Osaka Universtiy, Center for Advanced High Magnetic Field Science*	Spin-orbit-phonon interaction as an origin of helical-symmetry breaking spin-triplet superconducting state
11:40 – 12:00	Sa23	Alix McCollam *HFML-EMFL, Nijmegen*	Quantum oscillation studies of heavy fermion superconductors in high magnetic fields
12:00 – 12:20	Sa24	Hilbert v. Löhneysen *Karlsruhe Institute of Technology*	Unusual two-band proximity-induced superconductivity in a simple metal: contribution of bulk and surface states in silver islands on (110)-oriented niobium

12:20 – 12:40 Closing

Poster Session

P01:	Arvind Maurya *Tohoku University*	Electrical transport under pressure in non-centrosymmetric URhSn
P02:	Dai Aoki *Tohoku University*	Ferromagnetic quantum criticality in uranium compounds
P03:	Ryoya Murata *Hokkaido University*	Revisiting the crystal and magnetic structures of UNi_4B
P04:	Yo Tokunaga *ASRC, JAEA*	NMR study of magnetic spin fluctuations in UTe_2
P05:	Ryosuke Takeuchi *Kobe University*	^{11}B-NMR crystalline and magnetic structural study of single crystal UNi_4B
P06:	Hisatomo Harima *Kobe University*	How to obtain Fermi surfaces of UTe_2
P07:	Fusako Kon *Hokkaido University*	Specific heat, magnetization and electrical resistivity measurements on single-crystal UIr_2Ge_2
P08:	Carley Paulsen *Insitut Neel, CNRS*	UTe_2 low temperature magnetisation measurements
P09:	Fuminori Honda *Tohoku University*	Electronic properties of an antiferromagnet $UIrSi_3$ with non-centrosymmetric crystal structure
P10:	Yusei Shimizu *Tohoku University*	Unconventional superconductivity and non-Fermi-liquid behavior in pure and Th-doped UBe_{13}
P11:	Shota Nakagawa *Osaka University*	Superconducting state of $U_{0.96}Th_{0.04}Be_{13}$ probed by thermal hall resistivity
P12:	Kazushige Machida *Ritsumeikan University*	Theory of ferromagnetic superconductors –analogue of superfluid ^{3}He A-phase–
P13:	D. X. Li *TohokuUniversity*	Magnetic and electrical properties of the ternary compound $U_2T_3Si_5$ (T=Rh, Ir)
P14:	Yuichiro Noma *Kobe University*	^{73}Ge-NQR measurements of ferromagnetic superconductor UGe_2 under pressure
P15:	Yoshinori Haga *Japan Atomic Energy Agency*	Structural property of partially disordered intermetallic uranium compounds
P16:	Shinsaku Kambe *Japan Atomic Energy Agency*	NMR Study of Ce_3PtIn_{11}
P17:	Megumi Yatsushiro *Hokkaido University*	Crosscorrelation phenomena by odd-parity multipoles in CeCoSi
P18:	Masahiro Manago *Kobe University*	NMR study on the antiferromagnet CeCoSi
P19:	Yusuke Hirose *Niigata University*	High-field magnetization of $(Ce_{1-y}La_y)Ir(In_{1-x}X_x)_5$ (X=Cd and Sn)
P20:	Eiichi Matsuoka *Kobe University*	Magnetic and transport properties of a new Kondo-lattice compound $Ce_3NbRh_4Ge_4$
P21:	Yoshito Mikami *Hokkaido University*	Ultrasonic measurement on $CeRh_2Si_2$ under magnetic field and electric current
P22:	Hiraku Saito *High Energy Accelerator Research Organization*	Magnon excitations on a metallic antiferromagnet $CeRh_2Si_2$
P23:	Masaki Takemura *Kobe University*	Indication of ferromagnetic quantum critical point in Kondo lattice $CeRh_6Ge_4$
P24:	Yasuyuki Shimura *Hiroshima University*	Thermal expansion and magnetostriction measurements in the quasi-Kagome lattice CeIrSn
P25:	Mitsuharu Yashima *Osaka university*	Incommensurate antiferromagnetic order under pressure in $CeRhIn_5$

P26:	Sanu Mishra *LNCMI, CNRS*	Fermi surface of the heavy fermion system $CeRhIn_5$ in high magnetic fields
P27:	Tetsuya Takeuchi *Osaka University*	Anisotropic magnetic phase diagrams in $EuRh_2Si_2$
P28:	Shinya Matsuda *University of the Ryukyus*	Magnetic and Fermi surface properties of $EuAu_5$ and $EuCu_5$
P29:	Wataru Iha *University of the Ryukyus*	Single crystal growth and ferromagnetism of new compound $EuCu_{1+\delta}P_{1+\delta}$ (δ = 0.425)
P30:	Haruo Niki *University of the Ryukyus*	^{153}Eu zero-field NMR studies of antiferromagnetic state in $EuAl_4$
P31:	Toshiro Sakakibara *University of Tokyo*	Magnetization of the skyrmion lattice phase and fluctuation-induced tricritical point in EuPtSi
P32:	Fuminori Honda *Tohoku University*	Magnetic properties of an ferromagnet EuCu
P33:	Shinya Matsuda *University of the Ryukyus*	Single crystal growth and magnetic properties of antiferromagnets EuGe and $EuGe_2$
P34:	Wataru Iha *University of the Ryukyus*	de Haas–van alphen effect and Fermi surface properties of antiferromagnet EuSnP
P35:	Hironori Nakao *High Energy Accelerator Research Organization*	Observation of skyrmion and chiral soliton lattice states by coherent soft X-ray diffraction imaging
P36:	Ryuji Hoshi *The University of Electro-Communications*	AC specific heat measurement of $PrTi_2Al_{20}$ under pressure
P37:	Ko-ichi Magishi *Tokushima University*	NMR study of caged cubic compound NdT_2Al_{20} (T = Ti and V)
P38:	Rikako Yamamoto *Hiroshima University*	Observations of non-Fermi liquid behaviors in a Kramers G6 doublet system $Y_{1-x}Nd_xCo_2Zn_{20}$
P39:	Hitoshi Sugawara *Kobe University*	de Haas-van Alphen effect in $SmTi_2Al_{20}$
P40:	Isomae Takachika *University of Tokyo*	NQR investigation of multipolar orders in PrT_2Al_{20} (T=Ti,V)
P41:	Tetsuro Kubo *Okayama University of Science*	Development of slow fluctuations at low temperatures in $PrNb_2Al_{20}$ revealed by NMR measurements
P42:	Takahiro Onimaru *Hiroshima University*	Zn-site substitution effect on antiferromagnetic order in $NdCo_2Zn_{20}$
P43:	Kazunori Umeo *Hiroshima University*	Simultaneous suppression of antiferroquadrupolar order and superconductivity in $PrIr_2Zn_{20}$ by non-hydrostatic pressure
P44:	Ryo Adachi *Osaka University*	Hall effect of $PrPt_2Cd_{20}$ in the presence of quadrupole degrees of freedom
P45:	Mamoru Yogi *University of the Ryukyus*	NMR studies of structural stabilization by site-selective element substitution in 1-2-20 system
P46:	Hiroyuki Hidaka *Hokkaido University*	Helical magnetic ordering of $GdBe_{13}$
P47:	Yuka Kusanose *Hiroshima University*	Magnetic fields effect on the quadrupole interaction in the nonmagnetic doublet ground state of $PrMgNi_4$
P48:	Tatsuma D. Matsuda *Tokyo Metropolitan Univ.*	Discovery of a non-Fermi liquid behavior in $Yb_5Ir_6Sn_{18}$ at low temperatures
P49:	Shota Nakamura *Nagoya Institute of Technology*	New rare-earth intermetallic compounds $Dy_4Pd_9Ga_{24}$ and $Er_4Pd_9Ga_{24}$
P50:	Kazuyuki Omasa *Kobe University*	Single-crystal growth and de Haas-van Alphen effect in $LaIr_2$
P51:	Masataka Yamamoto *Hokkaido University*	Peculiar magnetic property of $TbNiC_2$

P52:	Yudai Ohmagari *Hiroshima University*	Magnetic and transport properties of rare-earth sulfides $RCuS_2$ (R = Dy, Ho, Er, Tm, and Yb)
P53:	Naoki Nakamura *Tokyo Metropolitan Univ.*	Investigations of an anomalous partially ordered magnetic state coexisting with heavy electron state of $SmPt_2Si_2$
P54:	Shogo Yoshida *University of Hyogo*	Pressure-induced nonmagnetic-magnetic transition in SmS observed by ^{33}S-NMR
P55:	Hideki Tou *Kobe University*	Low temperature P-NMR studies on ferromagnetic quantum criticality in $YbNi_4P_2$
P56:	Satoru Hamamoto *Osaka University*	Linearly polarized hard x-ray photoemission spectroscopy of $PrBe_{13}$
P57:	Anup P. Sakhya *Tata Institute of Fundamental Research*	Anomalous ground state properties of SmB_6-a density functional theoretical study
P58:	Hiroto Arima *The University of Electro-Communications*	Effect of pressure on the quadrupolar and magnetic order in cubic double perovskite Ba_2MgReO_6
P59:	Nobuyuki Abe *University of Tokyo*	Control of stability of charge-orbital ordered state by using uniaxial stress in A-site ordered $NdBaMn_2O_6$
P60:	Hiroki Hanate *Kyushu Institute of Technology*	Inelastic X-ray scattering study of phonon dispersion in the geometrically frustrated iridate $Ca_5Ir_3O_{12}$
P61:	Takuya Matsumoto *Hokkaido University*	Nonreciprocal magnon by symmetric anisotropic exchange interaction on a honeycomb antiferromagnet
P62:	Takumi Hasegawa *Hiroshima University*	Low temperature structure of geometrically frustrated iridates $Ca_5Ir_3O_{12}$ studied by Raman scattering method
P63:	Tatsuo C. Kobayashi *Okayama University*	Hall effect in $Cd_2Re_2O_7$ under high pressure
P64:	Masayuki Hagiwara *Osaka University*	Magnetization process of a spin-1/2 honeycomb-lattice antiferromagnet in ultra-high magnetic fields
P65:	Hiroto Nakamura *University of Tokyo*	Anomalous hall and nernst effects observed in ferromagnet CoMnSb
P66:	Shota Kanasugi *Kyoto University*	Multiorbital ferroelectric superconductivity in doped $SrTiO_3$
P67:	Sotaro Nishioka *Osaka University*	High-Tc superconducting state on intercalated $Li_x(NH_3)_yFeSe$ probed by NMR
P68:	Yoshiki J. Sato *Tohoku University*	Single crystal growth and superconducting properties of $CeIr_3$ single crystal
P69:	Yuhei Hirose *Tokyo University of Science*	d_{x2-y2}-Density wave and d_{x2-y2}-wave superconducting gap on the extended Hubbard model on a square lattice
P70:	Minoru Nohara *Okayama University*	Superconductivity in $IrIn_2$ with Ir infinite chain
P71:	Yoshikazu Mizuguchi *Tokyo Metropolitan Univ.*	Superconductivity in new layered oxychalcogenide $RE_2O_2M_4S_6$ (M = Bi, Ag, Sn)
P72:	Takayoshi Kouchi *Osaka University*	^{75}As-NMR/NQR studies on new iron-arsenide superconductor $LaFe_2As_2$ emerged in heavily electron-doped regime
P73:	Ryuta Iwazaki *Saitama University*	Effect of periodic drive on superconductor above transition temperature
P74:	Kenri Nakaima *University of the Ryukyus*	Fermi surfaces and magnetoresistances of dirac conduction electrons in PbX (X: S, Se, Te) and $AMnBi_2$ (A=Ca, Sr)
P75:	Jouji Ota *University of the Ryukyus*	de Haas-van alphen effect and fermi surface properties of Ti_2Sn_3
P76:	Toru Sakai *University of Hyogo*	Spin nematic phase of the quantum spin nanotube
P77:	Kota Kataoka *University of Tokyo*	New Kitaev spin liquid candidate $OsCl_3$

P78: Katsuki Nihongi
Osaka University
Development of magnetization measurement system in pulsed high field using a proximity detector oscillator

P79: Takanori Kida
Osaka University
High-field transport properties of the itinerant antiferromagnet $FeSn_2$

P80: Yuki Tani
Kobe University
Single crystal growth and physical properties of Ti_4MnBi_2 and La_3MnBi_5

P81: Takashi Matsui
Kobe University
Zn-substitution effect on metal-semiconductor transition in tetrahedrite

P82: Yoshiki Kuwata
Kobe University
NMR study of the first-order phase transition of NbCrP

P83: Junya Otsuki
Okayama University
Strong-coupling formula for momentum-dependent susceptibilities in the dynamical mean-field theory

P84: Hisashi Kotegawa
Kobe University
Magnetic correlations investigated by NMR for Mn_3P and CrAs

P85: Yutatsu Oe
Osaka University
Anisotropic fluctuation study of the nematic superconductor $Sr_xBi_2Se_3$

P86: Yangming Wang
University of Tokyo
Topological enhanced anomalous Nernst effect in L12-structure ferromagnet Fe_3Pt

P87: Michiyasu Mori
Japan Atomic Energy Agency
A possible mechanism of phonon skew scattering by spin clusters

P88: Arindam Pramanik
Tata Institute of Fundamental Research
On the nature of surface states in BiPd

P89: Kenri Nakaima
University of the Ryukyus
Electronic states in analog Sn_4P_3 with topological insulator Bi_2Se_3

P90: Yuki Utsumi Boucher
Institute of Physics
Electronic structure of $Yb(Ni_{1-x}Co_x)_3Ga_9$ studied by angle resolved photoelectron spectroscopy

P91: Kazuhei Wakiya
Yokohama National University
Structural and magnetic properties of $PrRu_2X_2Zn_{18}$ (X=In and Sn)

P92: Mingxuan Fu
University of Tokyo
Unveiling the quadrupolar Kondo effect in the heavy fermion superconductor PrV_2Al_{20}