List Of 2013 Reports

ID#	Title, First Author, and Category	Status
389	**Title:** Quantum Oscillations in the High-T_c Superconductor $YBa_2Cu_3O_{6+x}$ Near Optimal Doping **First Author:** Ramshaw, B.J., NHMFL-PFF, bradramshaw@gmail.com **PI:** Ramshaw, B.J., NHMFL-PFF, bradramshaw@gmail.com **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** Yes **Director's Recommendation:** Yes, definitely **Director's Comments:** None	Edited
465	**Title:** Excitonic and Superconducting Orders in Doped Honeycomb Bilayer **First Author:** Murray, J.M., NHMFL, james.murray1@gmail.com **PI:** Vafek, O., NHMFL and FSU, Physics, vafek@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** CMT/E **UCGP:** No **VSP:** No **Submitted to** Phys. Rev. Lett. **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** This work demonstrates a new mechanism for competing orders in correlated systems.	Edited
12	**Title:** Emergent Defect States in Fe-based Superconductors **First Author:** Hirschfeld, P.J., UF, Physics, pjh@phys.ufl.edu **PI:** Hirschfeld, P.J., UF, Physics, pjh@phys.ufl.edu **Category:** Superconductivity - Basic **Facility:** UF Physics **UCGP:** No **VSP:** No **Submitted to** Phys. Rev. Lett. **Sign. Achievement:** No **Director's Recommendation:** Yes **Director's Comments:** None	Edited
74	**Title:** Small and Nearly Isotropic Hole-Like Fermi Surfaces in LiFeAs Detected Through the de Haas–van Alphen Effect **First Author:** Zeng, B., National High Magnetic Field Lab, bzeng@magnet.fsu.edu **PI:** Balicas, L., National High Magnetic Field Lab, balicas@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Published in** Phys. Rev. B 88, 144518 **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
65	**Title:** Spin Fluctuations in F Doped LaOFeAs Studied by High-Field NMR Spectroscopy **First Author:** Gräfe, U.G., IFW Dresden, Institute for Solid State Research, u.graefe@ifw-dresden.de **PI:** Hammerath, F.H., Universitá di Pavia, Dipartimento di Fisica and Unit`a CNISM di Pavia, franziska.hammerath@unipv.it **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Published in** Phys. Rev. B 88 104503 **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
148	**Title:** Search for Charge Order in $HgBa_2CuO_{4+\delta}$ **First Author:** Mounce, A.M., Northwestern University, Physics, w-halperin@northwestern.edu **PI:** Mounce, A.M., Northwestern University, Physics, w-halperin@northwestern.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Published in** Phys. Rev. Lett. 111, 187003 (2013) **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
171	**Title:** High-Field Exploration of Charge Order in Underdoped $YBa_2Cu_3O_{6.77}$ **First Author:** Hirata, M., LNCMI Grenoble, michihiro.hirata@lncmi.cnrs.fr **PI:** Julien, M.-H., LNCMI Grenoble, marc-henri.julien@lncmi.cnrs.fr **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation	Edited

	Sign. Achievement: No **Director's Recommendation:** Yes **Director's Comments:** None	
179	**Title:** Fermi Surface Reconstruction in the Model Cuprate Superconductor $HgBa_2CuO_{4+\delta}$ **First Author:** Doiron-Leyraud, N., Université de Sherbrooke, Physics, Nicolas.Doiron-Leyraud@USherbrooke.ca **PI:** Taillefer, L., Université de Shebrooke, Physics, Louis.Taillefer@usherbrooke.ca **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Published in** Physical Review X 3, 021019 (2013) **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
234	**Title:** Valence Fluctuations in PuCoGa5 **First Author:** Ramshaw, B.J., National High Magnetic Field Laboratory-Pulsed Field Facility, bradramshaw@gmail.com **PI:** Bauer, E.B., Los Alamos National Laboratory (LANL), MST-10, edbauer@lanl.gov **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
235	**Title:** Two-Fold Fermi-Surface Anisotropy Revealed by Angle-Dependent Magneto-Resistance Measurements in $YBa_2Cu_3O_{6.58}$ **First Author:** Ramshaw, B.J., National High Magnetic Field Laboratory-Pulsed Field Facility, bradramshaw@gmail.com **PI:** Goddard, P., University of Warwick, Department of Physics, p.goddard@warwick.ac.uk **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
411	**Title:** Approaching Isotropy In The Vortex System Of Smfeas(O,F) At Extreme Magnetic Fields **First Author:** Moll, P.J.W., ETH Zurich, Switzerland, phmoll@phys.ethz.ch **PI:** Batlogg, B., ETH Zurich, Switzerland, batlogg@phys.ethz.ch **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** Yes **Director's Recommendation:** Yes **Director's Comments:** None	Edited
448	**Title:** J_c Oscillations in the Hybrid Vortex State of SmFeAs(O,F) **First Author:** Moll, P.J.W., ETH Zurich, Solid State Physics, phmoll@phys.ethz.ch **PI:** Batlogg, B., ETH Zurich, batlogg@phys.ethz.ch **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation:** Yes **Director's Comments:** None	Edited
452	**Title:** Anisotropic Hc2 Measurement on the $(Ca_{0.855}La_{0.145})_{10}(Pt_3As_8)(Fe_2As_2)_5$ High-Temperature Superconductor **First Author:** Mun, E.D., Ames Laboratory, richflavor@gmail.com **PI:** Ronning, F., LANL, fronning@lanl.gov **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
453	**Title:** Hysteretic Quantum Oscillations in Underdoped Cuprates from Nesting Driven Charge Order **First Author:** Sebastian, S.E., University of Cambridge, Physics, ses59@cam.ac.uk **PI:** Harrison, N., National High Magnetic Field Laboratory, Los Alamos, nharrison@lanl.gov **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL	Edited

	UCGP: No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	
454	**Title:** Universality of Quantum Oscillations across YBCO123 and YBCO248 **First Author:** Sebastian, S.E., University of Cambridge, Physics, ses59@cam.ac.uk **PI:** Sebastian, S.E., University of Cambridge, Physics, ses59@cam.ac.uk **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
464	**Title:** Iron-Based Superconductors: Space Group Symmetry, Spin-Orbit Coupling, and the Low Energy Effective Action **First Author:** Cvetkovic, V., NHMFL, cvetkovic@magnet.fsu.edu **PI:** Vafek, O., NHMFL and FSU , Physics, vafek@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** CMT/E **UCGP:** No **VSP:** No **Published in** Phys. Rev. B vol 88, issue 13, page 134510 **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
413	**Title:** Transport Measurements of Feas Superconductors in the 150T Single-Turn Magnet **First Author:** Moll, P.J.W., ETH Zurich, Switzerland, phmoll@phys.ethz.ch **PI:** Batlogg, B., ETH Zurich, Switzerland, batlogg@phys.ethz.ch **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
415	**Title:** Magnetotransport Near A Quantum Critical Point **First Author:** Analytis, J.G., University of california Berkeley, University of california Berkeley, analytis@berkeley.edu **PI:** Analytis, J., University of california Berkeley, University of california Berkeley, analytis@berkeley.edu **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP: Yes** **Accepted by** Nature Physics Not Available yet, but it is in press **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Edited
419	**Title:** Preliminary RF Measurements up to 100 T in the Model Cuprate HG1201 **First Author:** Barisic, N., CEA, France, Neven Barisic **PI:** Greven, M., U. of Minnesota, physics, greven@physics.umn.edu **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
426	**Title:** Resonant Ultrasound Spectroscopy (RUS) In Magnetic Field on Ultra-High Quality YBCO Single Crystal Cuprates **First Author:** Shehter, A., pulsed field facility , NHMFL, LANL, arkady@lanl.gov **PI:** Shehter, A., pulsed field facility , NHMFL, LANL, arkady@lanl.gov **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Edited
428	**Title:** High Field Heat Capacity of Under-Doped LSCO **First Author:** Kemper, J.B., Florida State Univ., Physics, kemper@magnet.fsu.edu **PI:** Mandrus, D., University of Tennessee, Materials Engineering, dmandrus@utk.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No	Edited

	Director's Recommendation: No **Director's Comments:** None	
332	**Title:** Zero-Magnetic-Field Phase-Decoherence Transition in Underdoped $La_{2-x}Sr_xCuO_4$ **First Author:** Baity, P., NHMFL, Florida State University, Physics, baity@magnet.fsu.edu **PI:** Popovic, D., NHMFL, Florida State University, dragana@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** CMT/E **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
342	**Title:** NMR Investigation of Spin Fluctuations near Hc2 in Ba(Fe1-xCox)2As2 **First Author:** Dioguardi, A.P., UC Davis, Physics, adioguardi@ucdavis.edu **PI:** Curro, N.J., UC Davis, Physics, curro@physics.ucdavis.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
347	**Title:** Torque Magnetometry of High Temperature Superconductors in Pulsed Magnetic Fields **First Author:** Yu, F., University of Michigan, Physics, fanyuchn@umich.edu **PI:** Li, L., University of Michigan, Physics, luli@umich.edu **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
196	**Title:** Magnetoresistivity of the Cuprate Superconductor $Nd_{2-x}Ce_xCuO_{4-\delta}$ (NCCO) **First Author:** Li, Y., Univeristy of Minnesota, Physics, yl@physics.umn.edu **PI:** Greven, M., Univeristy of Minnesota, Physics, greven@physics.umn.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
177	**Title:** Mapping Out the Phase Diagram for Superconductivity on $Ir_{(1-x)}Pt_xTe_2$ **First Author:** Kiswandhi, A., FSU, NHMFL, Physics, kiswandhi@magnet.fsu.edu **PI:** Zhou, H.D., University of Tennessee Knoxville, NHMFL, Physics, hzhou10@utk.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
149	**Title:** Anomalous Enhancement of the Upper Critical Field In Fullerene Superconductors Near The Mott Transition **First Author:** Kasahara, Y., University of Tokyo, Department of Applied Physics and Quantum-Phase Electronics Center, kasahara@ap.t.u-tokyo.ac.jp **PI:** Iwasa, Y., University of Tokyo, Department of Applied Physics and Quantum-Phase Electronics Center, iwasa@ap.t.u-tokyo.ac.jp **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
150	**Title:** High Field NMR in Transition Metal Substituted $BaFe_2As_2$ **First Author:** Garitezi, T.M., Unicamp, thalesmg@ifi.unicamp.br **PI:** Urbano, R.R., Unicamp, urbano@ifi.unicamp.br **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Accepted by** J. Appl. Phys. **Sign. Achievement:** No **Director's Recommendation: No**	Edited

	Director's Comments: None	
68	**Title:** Two Regimes in Conductivity and the Hall Coefficient of Underdoped Cuprates in Strong Magnetic Fields **First Author:** Gor'kov, L.P., FSU NHMFL, gorkov@magnet.fsu.edu **PI:** Gor'kov, L.P., FSU NHMFL, gorkov@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** CMT/E **UCGP:** No **VSP:** No **Submitted to** J. Phys. -Condens. Mat. **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
75	**Title:** Anomalous Metallic State and Anisotropic Multiband Superconductivity in $Nb_3Pd_{0.7}Se_7$ **First Author:** Zhang, Q.R., National High Magnetic Field Lab, qiuzhang@magnet.fsu.edu **PI:** Balicas, L., National High Magnetic Field Lab, balicas@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Published in** Phys. Rev. B 88, 024508 **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Edited
77	**Title:** High Field Heat Capacity of the Cuprate Hg1201 **First Author:** Kemper, J.B., Florida State Univ., NHMFL/Physics, kemper@magnet.fsu.edu **PI:** Greven, M., Univ. Of Minnesota, Physics, greven@physics.umn.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
78	**Title:** High Field Heat Capacity of YBCO 6.47 **First Author:** Kemper, J.B., Florida State Univ., NHMFL/Physics, kemper@magnet.fsu.edu **PI:** Boebinger, G.S., Florida State Univ., NHMFL/Physics, gsb@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Edited
117	**Title:** Interplay of Spin Fluctuations and Superconductivity in $Ba(Fe_{1-x}Co_{x2}$ Probed by High-Field ^{75}As NMR **First Author:** Gräfe, U.G., IFW Dresden, Institute for Solid State Research, u.graefe@ifw-dresden.de **PI:** Kühne, H.K., NHMFL, h.kuehne@hzdr.de **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP: Yes** **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
136	**Title:** Inductive Magnetic Susceptibility Measurements on Nanoparticle $(TMTSF)_2ClO_4$ **First Author:** Winter, L.E., Florida State University/National High Magnetic Field Laboratory, Physics, lew09d@my.fsu.edu **PI:** Brooks, J.S., Florida State University/National High Magnetic Field Laboratory, Physics, brooks@magnet.fsu.edu **Category:** Superconductivity - Basic **Facility:** CMT/E **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
13	**Title:** 3D Spin Fluctuation Calculations of Pairing Strength in Iron-based Superconductors **First Author:** Hirschfeld, P.J., UF, Physics, pjh@phys.ufl.edu **PI:** Hirschfeld, P.J., UF, Physics, pjh@phys.ufl.edu **Category:** Superconductivity - Basic **Facility:** UF Physics **UCGP:** No **VSP:** No **Published in** Phys. Rev. B 88, 094522 **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited

27	**Title:** High-Field NMR Study of the Iron-Based High-T_c Superconductor **First Author:** Li, Z., Institute of Physics, CAS, lizheng@iphy.ac.cn **PI:** Zheng, G.Q., Okayama University, Physics, zheng@psun.phys.okayama-u.ac.jp **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Not at this time **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
35	**Title:** Ion Irradiation to $FeSe_{0.5}Te_{0.5}$ Superconducting Films **First Author:** Ozaki, T.O., Brookhaven National Laboratory, Condensed Matter Physics & Materials Science Department, tozaki@bnl.gov **PI:** Li, Q.L., Brookhaven National Laboratory, Condensed Matter Physics & Materials Science Department, liqiang@bnl.gov **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
36	**Title:** High Magnetic Fields Reveal Pinning Mechanism in P-doped Ba-122 **First Author:** Hänisch, J., IFW Dresden, j.haenisch@ifw-dresden.de **PI:** Hänisch, J., IFW Dresden, j.haenisch@ifw-dresden.de **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
57	**Title:** Magnetic Torque Measurements on $(Ba_{1-x}K_x)Fe_2As_2$ **First Author:** Terashima, T., NIMS, Terashima.Taichi@nims.go.jp **PI:** Terashima, T., NIMS, Terashima.Taichi@nims.go.jp **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
59	**Title:** High-field Study of Superconducting Thallium Doped Lead Telluride $(Pb_{1-x}Tl_xTe)$ **First Author:** Giraldo-Gallo, P., Stanford University, GLAM and Physics, pgiraldo@stanford.edu **PI:** Fisher, I.R., Stanford University, GLAM and Applied Physics, irfisher@stanford.edu **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
61	**Title:** High-Field Study of the Electrical Transport of Nanostructured Bi_3Ni at Very Low Temperatures **First Author:** Schoenemann, R., HLD, r.schoenemann@hzdr.de **PI:** Herrmannsdoerfer, T., HLD, t.herrmannsdoerfer@hzdr.de **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement: Yes** **Director's Recommendation: No** **Director's Comments:** None	Edited
62	**Title:** Project No. P02266-DC: Determination of the Upper Critical Field of Cuprates by Electrical Transport under High Magnetic Field **First Author:** Wu, J., Brookhaven National Laboratory, jwu@bnl.gov **PI:** Bozovic, I., Brookhaven National Laboratory, bozovic@bnl.gov **Category:** Superconductivity - Basic **Facility:** DC Field Facility **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited

410	**Title:** Accurate determination of the Effective Mass in the Underdoped High Tc Superconductor $YBa_2Cu_4O_8$ **First Author:** Sebastian, S.E., Univ. Cambridge, ses59@ac.cam.uk **PI:** Sebastian, S.E., Univ. Cambridge, ses59@ac.cam.uk **Category:** Superconductivity - Basic **Facility:** Pulsed Field Facility at LANL **UCGP:** No **VSP:** No **Publication Status:** Manuscript in preparation **Sign. Achievement:** No **Director's Recommendation: No** **Director's Comments:** None	Edited
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