

**Kevin Storr, Ph.D.**  
**Associate Professor of Physics**

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**936-261-3132**

**Education**

- **Florida State University**, Tallahassee FL  
**Ph.D.** August, 2001 (Department of Physics, National High Magnetic Field Laboratory)
- **Florida State University**, Tallahassee FL,  
**M.S.** May, 2000 (Department of Physics, National High Magnetic Field Laboratory)
- **Prairie View A&M University**, Prairie View TX  
**B.S.** August 1996 (Department of Physics)
- **Prairie View A&M University**, Prairie View TX  
**B.S.** August 1996 (Department of Computer Science)

**Research  
Interests**

- Condensed Matter Materials Physics
- Characterization of the Electronic and Magnetic properties of the heavy fermion superconductor CeCoIn<sub>5</sub>, hybridized graphene and organic conductors using the extreme conditions of high magnetic fields and low temperatures.
- Resistivity and Magnetization measurements.
- Superconducting magnets and Dilution Refrigerators

**Positions**

- **Associate Professor of Physics**, Prairie View A&M University  
Prairie View Texas, August 2010 – Present
- **Advisor to the Office of the Ambassador at Large for the Republic of Burundi**, November 2014 - Present
- **Assistant Professor of Physics**, Prairie View A&M University  
Prairie View Texas, July 2004 – August 2010
- **Visiting Research Scientist**, National High Magnetic Field Lab  
Tallahassee Florida, June 2005 – Present
- **Postdoctoral Associate**, National High Magnetic Field Laboratory,  
Tallahassee Florida, August 2001 – July 2004
- **Visiting Professor of Physics**, Florida A&M University  
Tallahassee Florida, August 2002 – July 2004
- **Adjunct Professor of Physics**, Florida A&M University  
Tallahassee Florida, August 2001 – August 2002

**Grant Writing  
Funding**

- Department of Defense (Army Research Office), **Aug. 2011 – Aug. 2014 \$504,997**
- National Science Foundation (MRI) Supplemental, **Aug. 2010– May 2010 \$25,000**
- National Science Foundation (MRI), **Aug. 2006–Dec. 2009 \$321,173**
- National Science Foundation (IGERT), **February 2006 - Present, \$100,000**

- **Department of Energy (NNSA) September 2005 – Dec. 2008**  
\$1,500,000; Research on the Actinides and Related Materials

## Activities

- **Thesis Advisor of Graduate Students**, Fall 05 - Present
- **Faculty Senator Prairie View A&M University**, Sept. 08 - 2013
- **Chairman of Recruitment and Retention, Department of Physics, Prairie View A&M University**, July 2008 - Present
- **Chairman of Curriculum and Instruction, Department of Physics, Prairie View A&M University**, August 2004 – July 2008
- **Advisor, Gamma Phi Delta Fraternity**, Beta Exodus Chapter Prairie View A&M University, Fall 2004 – Spring 2009
- **Former Trainer, Department of Family and Children's Services**, State of Florida
- **Former Trainer, Florida Pharmacy Association**, State of Florida
- **Former Director of Youth and Education** Organized community events and instructional programs for age groups ranging from adolescence to adults. Put together study lessons; perform training & development seminars. Mediation and advising. Work with the Juvenile Center of Tallahassee (troubled teenagers) and Springhill Road Rehabilitation Center

## Membership

**American Physical Society**  
**I Change Nations**

## Masters Students

### Past

1. **Ms. Obiageli Nwosu**, *Probing the Fermi Surface of the Heavy Fermion Superconductor CeCoIn<sub>5</sub> Using Cantilever Magnetometry*, **MS, Spring 2011.**
2. **Mr. Ian Michelin**, *Capacitive Sensors for Detecting Intraocular Pressure*, **MS, Spring 2011.**
3. **Mr. Craig Bazil**, *Adaptive Multi-resolution Modulation for Multimedia Wireless Communication*, **MS, Fall 2010.**
4. **Ms. Katrina Akita**, *Interdisciplinary Study of the Intermetallic Heavy Fermion Superconductor CeCoIn<sub>5</sub>*, **MS, Fall 2010.**

## Publications & Scientific Activities

1. Li Song, Luis Balicas, Duncan J. Mowbray, Rodrigo B. Capaz, **Kevin Storr**, Lijie Ci, Deep Jariwala, Stefan Kurth, Steven G. Louie, Angel Rubio, and Pulickel M. Ajayan, *Anomalous insulator-metal transition in boron nitride-graphene hybrid atomic layers*. **Phys. Rev. B**, **86**, 075429 (2012).
2. Lijie Ci, Li Song, Chuanhong Jin, Deep Jariwala, Dangxin Wu, Yongjie Li, Anchal Srivastava, **Kevin Storr**, Luis Balicas, Feng Liu, Pulickel M. Ajayan, *Atomic layers of hybridized boron nitride and graphene domains*. **Nature Materials**, 2010; DOI: 10.1038/nmat2711.
3. Jo, Y.J.; Balicas, L.; Kikugawa, N.; Choi, E.S.; Storr, K.; Zhou, M. and Mao, Z.Q., *Orbital-dependent metamagnetic response in  $Sr_4Ru_3O_{10}$* , **Phys. Rev. B**, **75**, 094413 (2007)
4. Balicas, L.; Analytis, J.G.; Jo, Y.J.; Storr, K.; Zandbergen, H.; Xin, Y.; Hussey, N.E.; Chou, F.C. and Lee, P.A., *Shubnikov–de Haas Effect in the Metallic State of  $Na_{0.3}CoO_2$* , **Phys. Rev. Lett.**, **97**, 126401 (2006)
5. Brooks, J.S.; Williams, V.; Choi, E.; Graf, D.; Tokumoto, M.; Uji, S.; Zuo, F.; Wosnitza, J.; Schlueter, J. A.; Davis, H.; Winter, R.W.; Gard, G.L. and Storr, K., *Fermiology and superconductivity at high magnetic fields in a completely organic cation radical salt*, **New Journal of Physics**, **8**, 25 (2006)
6. Jo, Y.J.; Balicas, L.; Kikugawa, N.; Storr, K.; Zhou M. and Mao, Z.Q., *Shubnikov-de Haas effect across a metamagnetic transition in high quality single crystals of  $Sr_4Ru_3O_{10}$* , **J. Physics: Conference Series**, **51**, 247 (2006)
7. Balicas, L.; Barzykin, V.; Storr, K.; Brooks, J.S.; Tokumoto, M.; Uji, S.; Tanaka, H.; Kobayashi, H. and Kobayashi, A., *Pressure-induced enhancement of the transition temperature of the magnetic-field induced superconducting state in  $\lambda$ -(BETS) $_2$ FeCl $_4$* , **Phys. Rev. B**, **70** (9), 092508 (2004)
8. Balicas, L.; Barzykin, V.; Storr, K.; Brooks, J.S.; Tokumoto, M.; Uji, S.; Tanaka, H.; Kobayashi, H. and Kobayashi, A., *The effect of pressure on the phase diagram of the magnetic field-induced superconducting state of  $\lambda$ -(BETS) $_2$ FeCl $_4$* , *Journal de Physique IV*, **114**, 199 (2004)
9. Brooks, J.S.; Balicas, L.; **Storr, K.**; Kobayashi, H.; Tanaka, H.; Kobayashi, A.; Uji, S. and Tokumoto, M., *Novel features of the newly discovered field-induced superconducting phase of  $\lambda$ -(BETS) $_2$ FeCl $_4$* , *Synthetic Met.*, **1-4**, 485 (2003)
10. Brooks, J.S.; Graf, D.; Choi, E.S.; Balicas, L.; **Storr, K.**; Mielke, C.H. and Papavassiliou, G.C., *High-magnetic-field-induced insulating phase in an organic conductor*, *Phys. Rev. B*, **67**, 153404 (2003)

11. Iwashita, K.; Yamamoto, H.M.; Yoshino, H.; Graf, D.; **Storr, K.**; Rutel, I.; Brooks, J.S.; Takahashi, T. and Murata, K., *Uniaxial strain dependence of electronic states of theta-(BEDT-TTF)<sub>2</sub>MZn(SCN)<sub>4</sub> [M = Cs, Rb]*, Synthetic Met., **133**, 153-155 (2003)
12. Murata, K.; Iwashita, K.; Mizuno, Y.; Guo, F.Z.; Shodai, S.; Yoshino, H.; Brooks, J.S.; Balicas, L.; Graf, D.; **Storr, K.**; Rutel, I.; Uji, S.; Terakura, C. and Yamanaka, Y., *Spin-density wave under uniaxial strain in (TMTSF)<sub>2</sub>PF<sub>6</sub>*, Synthetic Met., **1-4**, 51 (2003)
13. Balicas, L.; Brooks, J.S.; **Storr, K.**; Uji, S.; Tokumoto, M.; Tanaka, H.; Kobayashi, H.; Kobayashi, A.; Barzykin, V. and Gor'kov, L.P., *High Field Phase Diagram of the Field-Induced Superconducting State of  $\lambda$ -(BETS)<sub>2</sub>FeCl<sub>4</sub>*, Int. J. Mod. Phys. B, **16** (20-22), 3101 (2002)
14. Brooks, J.S.; Balicas, L.; **Storr, K.**; Ward, B.H.; Uji, S.; Terashima, T.; Terakura, C.; Schlueter, J.A.; Winter, R.W.; Motasham, J.; Gard, G.L.; Papavassiliou, G.C. and Tokumoto, M., *Electronic Structure of Novel Cation-Radical Salts in High Magnetic Fields*, Mol. Cryst. Liq. Cryst., **380**, 109 (2002)
15. Murata, K.; Iwashita, K.; Mizuno, Y.; Guo, F.Z.; Shodai, S.; Yoshino, H.; Brooks, J.S.; Balicas, L.; Graf, D.; **Storr, K.**; Rutel, I.; Uji, S.; Terakura, C. and Imanaka, Y., *Uniaxial strain and anisotropy in the spin density wave in (TMTSF)<sub>2</sub>PF<sub>6</sub>*, J. Physics and Chemistry of Solids, **63** (6-8), 1263-1265 (2002)
16. Balicas, L.; Brooks, J.S.; **Storr, K.**; Uji, S.; Tokumoto, M.; Tanaka, H.; Kobayashi, H.; Kobayashi, A.; Barzykin, V. and Gor'kov, L.P., *Superconductivity in an organic insulator at very high magnetic fields*, Phys. Rev. Lett., **87** (6), 067002 (2001)
17. **Storr, K.**; Balicas, L.; Brooks, J.S. and Papavassiliou, G., *Magnetic-Field-Dependent Interplay Between Incoherent and Fermi Liquid Transport Mechanisms in Low-Dimensional t-Phase Organic Conductors*, Phys. Rev. B, **64**, 045107 (2001)
18. Balicas, L.; Brooks, J.S.; **Storr, K.**; Graf, D.; Uji, S.; Shinagawa, H.; Ojima, E.; Fujiwara, H.; Kobayashi, H.; Kobayashi, A. and Tokumoto, M., *Shubnikov-de Haas effect and Yamaji oscillations in the antiferromagnetically ordered organic superconductor  $k$ -(BETS)<sub>2</sub>FeBr<sub>4</sub>: a fermiology study*, Solid State Commun., **116**, 557-562 (2000)
19. Ng, H.K.; Leem, Y.A. and **Storr, K.**, *Oscillatory Cyclotron Resonance Effective Mass Near  $\nu = 1$  and 2 in Modulation-Doped ZnSe/Zn<sub>1-x-y</sub>CdxMnySe*, J. Appl. Phys., **87** (9), 6466 (2000)

***Presentations, Posters & Abstracts***

1. **Storr, K**, *PV-Physics of Magnetic Fields and Low Temperatures*, Department of Physics Prairie View A&M University, Prairie View Texas, October (2008)
2. Jo, Y.J.; Balicas, L.; Kikugawa, N.; Choi, E.S.; **Storr, K.**; Zhou, M. and Mao, Z.Q., *Orbital-dependent Metamagnetic Response in  $Sr_4Ru_3O_{10}$* , Orbital Physics Conf. 2007, Stuttgart, Germany, October 10-12 (2007)
3. Jo, Y.J.; Balicas, L.; Kikugawa, N.; Choi, E.S.; **Storr, K.**; Zhou, M. and Mao, Z.Q., *Orbital-dependent metamagnetic response in  $Sr_4Ru_3O_{10}$* , Int. Conf. on Strongly Correlated Electron Systems 2007, Houston, TX, May 13-18 (2007)
4. **Storr, K**, Brooks, J, Balicas, L, Graf, D, **Invited Speaker**, *Electronic and Magnetic Properties of Low-Dimensional Organic Conductors*, North Carolina A&T University, Greensboro, NC November (2006)
5. **Storr, K**, Balicas, L.; and Brooks, J.S., et al., **Invited Speaker**, *Field-Induced Superconductivity in an Organic Insulator*, Rice University, Houston Tx. October (2006)
6. Jo, Y.J.; Balicas, L.; Kikugawa, N.; **Storr, K.**; Mackenzie, A.P. and Mao, Z., *Shubnikov de Haas Oscillations across the Metamagnetic Transition in  $Sr_4Ru_3O_{10}$* , American Physical Society March Meeting, Baltimore, MD, March 13-17 (2006)
7. *M. Golam Faruk, Orion Ciftja, Kevin Storr*, A Variational Wave Function for two-dimensional quantum-dot helium, APS March Meeting, Baltimore, March 13-17 (2006)
8. Jo, Y.J.; Balicas, L.; Kikugawa, N.; Storr, K.; Mackenzie, A.P. and Mao, Z., *Shubnikov de Haas Oscillations across the Metamagnetic transition in  $Sr_4Ru_3O_{10}$* , APS March Meeting, Baltimore, March 13-17 (2006)
9. **Storr, K**, Balicas, L, Brooks J, **Invited Speaker Session Organizer**, *Electrical Transport in Layered Anisotropic Single Crystals using High Magnetic Fields and Low Temperatures* National Conference of Black Physicists, San Jose Ca, February (2006)
10. **Storr, K**, **Invited Speaker**, National High Magnetic Field Laboratory NSF Site Visit, *College Outreach Program*, Tallahassee Florida (2005)
11. **Storr, K**, Balicas, L.; and Brooks, J.S., et al., **Invited Speaker**, Superconductivity in an Organic Insulator at Very High Magnetic Fields, Texas A&M University, College Station Tx. October (2004)
12. **Storr, K**, Balicas, L.; and Brooks, J.S., et al., *Magnetic-field Studies of Anisotropic Organic Conductors*, Prairie View Tx, April (2004)

13. **Storr, K.**, Balicas, L.; and Brooks, J.S., et al., Superconductivity in an Organic Insulator at Very High Magnetic Fields, National Society of Black Physicists Conference, Atlanta Ga. March (2003)
14. Balicas, L.; Brooks, J.S. and **Storr, K.**, et al., *Superconductivity in an organic insulator at very high magnetic fields*, Montana State University, Bozeman, April (2001)
15. Balicas, L.; Brooks, J.S. and **Storr, K.**, et al., *Superconductivity in an organic insulator at very high magnetic fields*, National High Magnetic Field Laboratory-Pulsed Field Facility, Los Alamos, New Mexico, June (2001)
16. Balicas, L.; Brooks, J.S. and **Storr, K.**, et al., *Superconductivity in an organic insulator at very high magnetic fields*, Physics Department, Oakland University, February (2001)
17. Balicas, L.; Brooks, J.S. and **Storr, K.**, et al., *Superconductivity in an organic insulator at very high magnetic fields*, Physics Department, University of Florida, Gainesville, FL, November (2001)
18. **Storr, K.**, Balicas, L.; and Brooks, J.S., et al., *Magnetic-field-dependent interplay between incoherent and Fermi liquid transport mechanisms in low-dimensional t-phase organic conductors*, 2001, Stanford Ca. March (2001)
19. Balicas, L.; Brooks, J.S.; **Storr, K.**; Graf, D.; Uji, S.; Shinagawa, H.; Ojima, E.; Fujiwara, H.; Kobayashi, H.; Kobayashi, A. and Tokumoto, M., *Shubnikov-de Haas Effect and Yamaji Oscillations in the Antiferromagnetically Ordered Organic Superconductor  $k$ -(BETS) $_2$ FeBr $_4$ : A Fermiology Study*, 2001 APS March Meeting, Seattle, WA, March 12-16 (2001)
20. Balicas, L.; **Storr, K.**; Brooks, J.S.; Uji, S.; Ojima, E.; Fujiwara, H.; Kobayashi, H. and Tokumoto, M., *A magnetic field induced phase transition, from metallic to a highly conducting state, in the antiferromagnetic insulator  $\lambda$ -(BETS) $_2$ FeCl $_4$* , 2001 APS March Meeting, Seattle, WA, March 12-16 (2001)
21. Brooks, J.S; Uji, S.; Terashima, T.; Terakura, C.; Papavassiliou, G.; Balicas, L. and **Storr, K.**, *Magnetic-field dependent electronic structure in the "tau-phase" class of low dimensional organic metals*, 2001 APS March Meeting, Seattle, WA, March 12-16 (2001)
22. **Storr, K.**; Balicas, L.; Brooks, J.S. and Papavassiliou, G., *Magnetic-field-dependent interplay between incoherent and Fermi liquid transport mechanisms in low-dimensional t-phase organic conductors*, 2001 APS March Meeting, Seattle, WA, March 12-16 (2001)
23. Brooks, J.S.; Balicas, L.; **Storr, K.**; Ward, B.H.; Uji, S.; Terashima, T.; Terakura, C.; Schlueter, J.A.; Winter, R.W.; Mohtasham, J.; Gard, G.L.; Papavassiliou, G.C. and Tokumoto, M., *Electronic Structure of Novel Cation Radical Salts in High Magnetic Fields. Proceedings of Pac. Chem. Conference.*