

Brandon Murakami
High Energy Division 362, Argonne National Laboratory
9700 South Cass Avenue, Argonne, IL 60439
(630) 252-1373, FAX (630) 252-5047
murakami@hep.anl.gov

Education

- Ph.D. Physics, University of California, Davis, 2002.
- B.A. Physics, University of California, Berkeley, 1993.

Research Appointments

- August 2002 to present. Research Associate. High Energy Physics Division, Theory Group, Argonne National Laboratory.

Publications

1. D. Maybury and B. Murakami, “Differentiating solutions to the gauge hierarchy problem through rare muon decays,” [hep-ph/0401170].
2. B. Campbell, D. Maybury, and B. Murakami, “See-Saw Induced CMSSM Lepton-Flavour Violation Post-WMAP,” [hep-ph/0311244].
3. B. Murakami and J.D. Wells, “Abelian D -terms and the superpartner spectrum of anomaly-mediated supersymmetry breaking,” Phys. Rev. D **68**, 035006 (2003), [hep-ph/0302209].
4. B. Murakami, K. Tobe, and J.D. Wells, “ D -term challenges for supersymmetric gauged abelian flavor symmetries,” Phys. Lett. B **526**, 157 (2002), [hep-ph/0111003].
5. B. Murakami, “The impact of lepton-flavor violating Z' bosons on muon $g-2$ and other muon observables,” Phys. Rev. D **65**, 055003 (2002), [hep-ph/0110095].
6. B. Murakami and J.D. Wells, “Complementarity of muon-conversion and collider-based experiments for generation-dependent $U(1)$ gauge bosons,” submitted to the Snowmass 2001 proceedings, [hep-ph/0111065].
7. T. Abe, *et al.* (American Linear Collider Working Group), *Linear Collider Physics Resource Book for Snowmass 2001*, <http://www.slac.stanford.edu/grp/th/LCBook/>.
8. B. Murakami and J.D. Wells, “Nucleon scattering with higgsino and wino cold dark matter,” Phys. Rev. D **64**, 015001 (2001), [hep-ph/0011082].

Seminars

- “Differentiating solutions to the gauge hierarchy problem through rare muon decays,” Northwestern University, Evanston, IL, March 1, 2004; Lake Louise Winter Institute 2004, Lake Louise, Alberta, February 17, 2004.
- “Establishing supersymmetry at forthcoming lepton flavor violation experiments,” University of Hawaii, Honolulu, HI, December 3, 2004; Michigan State University, East Lansing, MI, October 21, 2003; Argonne National Laboratory, Argonne, IL, November 13, 2003.
- “The impact of muon conversion experiments on linear collider studies,” American Linear Collider Workshop, July 14, 2003, Cornell University, Ithaca, NY.
- “Anomaly mediated supersymmetry breaking and the ancillary $U(1)$ formalism,” Argonne National Laboratory, Argonne, IL, March 11, 2003; SUGRA 20, Boston, MA, March 20, 2003; Fermi National Accelerator Laboratory, April 24, 2003; Pheno 2003, Madison, WI, May 5, 2003; SUSY 2003, Tucson, AZ, June 7, 2003; SLAC, Stanford, CA, September 10, 2003.
- “Lepton flavor violation through Z' bosons,” Argonne National Laboratory, Argonne, IL, February 18, 2002; also given at the 2nd APS California Section Meeting, Davis, CA, March 30, 2002 and Purdue University, West Lafayette, IN, September 23, 2002.
- “Complementarity of μ - e conversion and LC experiments for LFV Z' bosons,” APS Snowmass 2001 Summer Study, Snowmass, CO, July 2001.

Conference and Workshop Participation

- Lake Louise Winter Institute 2004, February 15-21, 2004, Lake Louise, Alberta.
- American Linear Collider Workshop, July 13-16, 2003, Cornell University, Ithaca, NY.
- SUSY 2003, June 5-10, 2003, University of Arizona, Tucson, AZ.
- Argonne Workshop on Trends in Neutrino Physics, May 12-16, 2003, Argonne National Laboratory, Argonne, IL.
- Pheno 2003, May 5-7, 2003, University of Wisconsin, Madison, WI.
- SUGRA 20, March 17-21, 2003, Northeastern University, Boston, MA.
- Argonne Theory Institute 2002, September 9-13, 2002, Argonne National Laboratory, Argonne, IL. Also participated in the workshop’s organization.
- Theoretical Advanced Study Institute 2002, June 3-29, 2001, University of Colorado, Boulder, CO.
- APS Snowmass 2001 Summer Study on the Future of Particle Physics, June 30-July 21, 2001, Snowmass, CO. Contributing author to the Snowmass 2001 proceedings and the *Linear Collider Physics Resource Book for Snowmass 2001*.
- Theoretical Advanced Study Institute 2001, June 3-29, 2001, University of Colorado,

Boulder, CO.

- UC Davis Higgs Workshop, January 27-28, 2001, University of California, Davis, CA. Also participated in the conference's organization.
- Berkeley 2000 Linear Collider Workshop, March 29-31, 2000, University of California, Berkeley, CA.
- PASCOS99, Lake Tahoe, December 10-16, 1999, Lake Tahoe, CA. Also participated in the conference's organization.

Awards

- GSA Travel Award, Graduate Student Association, UC Davis, June 2001.
- Ryan Couch Travel Award, Department of Physics, UC Davis, June 2001.
- University of California Grant (for doctoral dissertation), (four awards) 2000, 1999, 1998, and 1997.
- University of California Graduate Fee Fellowship, 1996.

Community Service and Leadership

- Theory seminar organizer for the High Energy Physics Division of Argonne National laboratory, August 2002 through present.
- Education and Outreach Program, Snowmass 2001, July 2001. Provided interactive discussions about science with elementary school students.
- Colloquium committee, Department of Physics, UC Davis, 1999. Assisted in finding colloquium speakers.
- Technology committee, Department of Physics, UC Davis, 1997. Assisted in making purchasing decisions for electronic and computer equipment.

Academic Appointments

- Teaching Assistant. University of California, Davis, 1996-2001. Also participated in physics education research by developing novel pedagogical methods.
- Research Assistant. University of California, Davis, 1999-2001.