CURRICULUM VITÆ

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Education

2005: Ph.D., University of Cincinnati, Cincinnati, OH

2001: M.S., Physics, University of Cincinnati, Cincinnati, OH

1997: B.S., Physics, Virginia Polytechnic Institute & State University, Blacksburg, VA

Academic Positions

2005-present: Research Associate, Boston University

1998-2005: Graduate Student, University of Cincinnati

2000-2005: Research Assistant

2003-2004: University Distinguished Dissertation Fellow

1998-2001: GAANN Fellow

1998-2000: Teaching Assistant

1997-1998: Graduate Student, Virginia Polytechnic Institute & State University

1997-1998: Philip Morris Fellow

1997-1998: Teaching Assistant

Honors

VPI & SU, Philip Morris Fellowship, 1997

University of Cincinnati, GAANN Fellowship (1998-2001)

Award to attend the International Committee for Future Accelerators (ICFA) instrumentation summer school in Faure, South Africa, 2001.

Award to attend the 51st meeting of Nobel Laureates in Lindau, Germany, 2001. Funded by DOE/ORAU.

University of Cincinnati, University Distinguished Dissertation Fellowship (2003-2004)

Collaboration/Experiment Participation

Super Kamiokande, 2005-present, ICRR, Mozumi, Japan

BooNE (E898), 2000-present, Fermilab, Batavia, IL

Belle, 1997-2000, KEK, Tsukuba, Japan

Technical Skills

Computer Programming:
Fortran, C, C++, HTML, Sed/Awk, Tcl, Data Reduction, Signal Analysis

Operating systems:
Linux, Unix, QNX, Solaris, OSX, Windows

Software:
ROOT, RooFit, PAW/PAW++, Mathematica, LaTeX

Hardware:
CAMAC, NIM, Data Acquisition Electronics, Machine Shop Tools, Some Construction Equipment

Memberships

2007-present: Boston University Women in Physics

2000-present: Young Particle Physicists (YPP) panel member

1999-2000: Physics Graduate Student Association Secretary, University of Cincinnati

1997-present: American Physical Society member

Presentations, Seminars and Colloquia

Neutrino 2008, Invited plenary talk, Christchurch, NZ, May 2008: *Solar and Atmospheric Neutrinos in Super-Kamiokande*

APS April Meeting, Parallel talk, St. Louis, MO, April 2008: *Recent Proton Decay Results from Super-Kamiokande*

University of Tokyo, ICRR HEP Seminar, May 2007: *First Oscillation Results from MiniBooNE*

ICRR Kamioka Observatory HEP Seminar, May 2007: *First Oscillation Results from MiniBooNE*

Tufts University HEP Seminar, Boston, MA, April 2007: *First Oscillation Results from MiniBooNE*

Boston University HEP Seminar, Boston, MA, April 2007: *First Oscillation Results from MiniBooNE*

Third International Workshop on Neutrino-Nucleus Interactions in the Few GeV Region Workshop (NuInt'04), Plenary session, Gran Sasso, Italy, March 2004: *Neutral Current π^0 Interactions at MiniBooNE*

Neutrino Oscillations and their Origins Workshop (NOON 2004), Plenary session, Tokyo, Japan, February 2004: *Neutrino Interactions at MiniBooNE*

NSF Presentation, Washington, D.C., October 2003: *Neutral Current π^0 Analysis in MiniBooNE*

SUNY Stonybrook HEP Seminar, Stonybrook, NY. December 2002: *MiniBooNE: New Kid on the Block*

Fermilab DOE Review, Poster session, Batavia, IL. March 2002: *Mineral Oil Tests for the MiniBooNE Detector*

APS April Meeting, Poster session, Albuquerque, NM, April, 2002: *Mineral Oil - It's Not Just a Laxative! Oil Tests for the MiniBooNE Experiment*

IEEE Nuclear Science Symposium, Parallel session, San Diego, CA. November 2001: *Mineral Oil Tests for the MiniBooNE Detector*

CERN EP Seminar, CERN, Geneva, Switzerland. July 2001: *Le Petit Neutrino*

American Physical Society, Parallel session, Washington, D. C. April 2001: *MiniBooNE: A Search for Neutrino Oscillations*

Selected Publications

"First Observation of Coherent π^0 Production in Neutrino Nucleus Interactions with $E_\nu < 2$ GeV," A. A. Aguilar-Arevalo *et al.* [BooNE Collaboration], Mar. 2008, arXiv:hep-ex/0803.3423, accepted for publication in Phys. Lett. **B**

"A search for electron neutrino appearance at the delta $m^2 \sim 1 - \mathrm{eV}^2$ scale," A. A. Aguilar-Arevalo *et al.* [BooNE Collaboration], Apr. 2007, arXiv:hep-ex/0707.1500, accepted for publication in Phys. Rev. Lett.

"Neutral Current π^0 Interactions at MiniBooNE," J. L. Raaf for the BooNE Collaboration. NuInt'04 Conference proceedings, arXiv:hep-ex/0408015

"Neutrino Interactions at MiniBooNE," J. L. Raaf for the BooNE Collaboration. NOON2004 Conference proceedings, arXiv:hep-ex/0408008

"Mineral Oil Tests for the MiniBooNE Detector," J. L. Raaf *et al.* for the BooNE Collaboration. IEEE Trans. Nucl. Sci. **49(3)**:957 (2002).

"Photomultiplier Tube Testing for the MiniBooNE Experiment." B. T. Fleming *et al.* for the BooNE Collaboration. IEEE Trans. Nucl. Sci. **49(3)**:984 (2002).

Other Publications

"Solar neutrino measurements in Super-Kamiokande-II," J. P. Cravens *et al.* [Super-Kamiokande Collaboration], Mar. 2008, arXiv:hep-ex/0803.4312, submitted for publication in Phys. Rev. **D**.

"Search for matter-dependent atmospheric neutrino oscillations in Super-Kamiokande," K. Abe *et al.* [Super-Kamiokande Collaboration], Mar. 2008. Phys. Rev. **D77**:052001.

"Constraining muon internal bremsstrahlung as a contribution to the MiniBooNE low energy excess," A. A. Aguilar-Arevalo *et al.* [BooNE Collaboration], Oct. 2007. Submitted to Phys. Rev. **D**

"Search for supernova neutrino bursts at Super-Kamiokande," M. Ikeda *et al.* [Super-Kamiokande Collaboration], Jun. 2007. Astrophys. J. **669**:519-524.

"Measurement of muon neutrino quasi-elastic scattering on carbon," A. A. Aguilar-Arevalo *et al.* [BooNE Collaboration], Jan. 2008. Phys. Rev. Lett. **100**:032301.

"Search for neutral Q-balls in Super-Kamiokande II," Y. Takenaga *et al.* [Super-Kamiokande Collaboration], Aug. 2006. Phys. Lett. **B 647**:18-22.

"A Measurement of atmospheric neutrino flux consistent with tau neutrino appearance," K. Abe *et al.* [Super-Kamiokande Collaboration], Jul. 2006. Phys. Rev. Lett. **97**: 171801.

"High energy neutrino astronomy using upward-going muons in Super-Kamiokande I," K. Abe *et al.* [Super-Kamiokande Collaboration], Jun. 2006. Astrophys. J. 652: 198.

"Search for Diffuse Astrophysical Neutrino Flux using Ultra-high Energy Upward-going Muons in Super-Kamiokande I," M. E. C. Swanson *et al.* [Super-Kamiokande Collaboration], Jul. 2006. Astrophys. J. 652:206-215.

BooNE has Begun. E. D. Zimmerman *et al.* [BooNE Collaboration], Nov. 2002. [arXiv:hep-ex/0211039].

Status of MiniBooNE. A .O .Bazarko *et al.* [BooNE Collaboration], Oct. 2002. [arXiv:hep-ex/0210020].

Short Baseline Neutrino Oscillations and MiniBooNE. J .M .Link *et al.* [BooNE Collaboration], Jan. 2002. Nucl. Phys. Proc. Suppl. **111**, 133 (2002)

Measurement of $B^0_d - \bar{B^0_d}$ mixing rate from the time evolution of dilepton events at the Upsilon(4S). K. Abe *et al.* [Belle Collaboration], Phys. Rev. Lett. **86**, 3228 (2001), [arXiv:hep-ex/0011090].

"The Miniboone Detector Technical Design Report," I. Stancu *et al.* [BooNE Collaboration], May 2001, FERMILAB-TM-2207.

Status of the BooNE Experiment. R. A. Johnson *et al.* [BooNE Collaboration]. Mar. 2001.

MiniBooNE: The Booster Neutrino Experiment. A. O. Bazarko *et al.* [BooNE Collaboration], Jan. 1999. [arXiv:hep-ex/9906003].

Electroweak Measurements and Neutrino Oscillations: The NuTeV and BooNE Experiments. M. H. Shaevitz *et al.* [NuTeV and BooNE Collaborations]. Apr. 1998.

BooNE, the LSND Effect, and Opportunities for Short Baseline Neutrino Facilities. [BooNE Collaboration]. May 1998.

Search for CP violation in tau semi-leptonic decay $\tau^{\pm} \to \pi^{\pm}\pi^0\nu_\tau$. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-88.

Measurement of $K^0_S\ \bar{K}^0_S$ production in two-photon collisions with Belle. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-87.

Search for the lepton flavor violating decay $\tau \to \ell K^0$. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-85.

CP/T test with tau leptons at Belle: Examination of T/CP invariance in $e^+e^- \to \tau^+\tau^- \to e\mu + neutrinos$. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-84.

Measurement of polarization of J/ψ in $B^0 \to J/\psi + K^{*0}$ and $B^+ \to J/\psi + K^{*+}$ decays. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-83.

Measurements of exclusive decays $\bar{B^0} \to D^+\ell^-\bar{\nu}$ and $\bar{B^0} \to D^{*+}\ell^-\bar{\nu}$ at Belle. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-82.

A search for the decay $B^0 \to {D_s}^+\pi^-$. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-81.

Observation of Cabibbo suppressed $B \to D^*K$ decays at Belle. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-80.

Measurement of inclusive production of neutral pions from Upsilon(4S) decays. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-79.

Evidence for the charmless decay $B^+ \to \Phi K^+$ at Belle. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-78.

A study of charmless hadronic B decays to h π^0 final states. A. Abashian *et al.* [Belle Collaboration], KEK-PREPRINT-2000-77.

References

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