

Publications

Janet M. Conrad

Particle Physics Publications in Refereed Journals:

- “Direct Measurement of Backgrounds using Reactor-Off Data in Double Chooz,” The Double Chooz Collaboration (Y. Abe, *et al.*), arXiv:1210.3748, Accepted to Physical Review D, Rapid Communications.
- “First Test of Lorentz Violation with a Reactor-based Antineutrino Experiment,” The Double Chooz Collaboration (Y. Abe, *et al.*), arxiv:1209.5810, Phys. Rev. D 86, 112009, 2012.
- “Dual baseline search for muon antineutrino disappearance at $0.1 \text{ eV}^2 < \Delta m^2 < 100 \text{ eV}^2$,” (G. Cheng, *et al.*), arXiv:1208.0322 [hep-ex], 2012, Phys. Rev. D 86, 052009, 2012.
- “Reactor electron antineutrino disappearance in the Double Chooz experiment,” (Y. Abe, *et al.*), arxiv:1207.6632 [hep-ex], Phys. Rev. D 86, 052008, 2012.
- “A Combined $\nu_\mu \rightarrow \nu_e$ and $\bar{\nu}_\mu \rightarrow \bar{\nu}_e$ Oscillation Analysis of the MiniBooNE Excesses,” The MiniBooNE Collaboration, (A. Aguilar-Arevalo, *et al.*), arxiv:1207.4809, 2012, Submitted to Physical Review Letters.
- “Sterile Neutrino Fits to Short Baseline Neutrino Oscillation Measurements,” J. M. Conrad, C. M. Ignarra, G. Karagiorgi, M. H. Shaevitz, J. Spitz, arXiv:1207.4765, Accepted to Advances in High Energy Physics, 2012.
- “An Electron Antineutrino Disappearance Search Using High-Rate ^8Li Production and Decay,” A. Bungau, A. Adelman, J. R. Alonso, W. Barletta, R. Barlow, L. Bartoszek, L. Calabretta and A. Calanna *et al.*, arXiv:1205.4419 [hep-ex], Phys. Rev. Lett. 109, 141802, 2012.
- “Viewpoint: Rethinking the Neutrino,” J.M. Conrad, Physics **5**, 47 2012.

- “Confronting the short-baseline oscillation anomalies with a single sterile neutrino and non-standard matter effects,” G. Karagiorgi, M.H. Shaevitz and J.M. Conrad, arXiv:1202.1024, Submitted to Physical Review D.
- “Measuring Active-to-Sterile Neutrino Oscillations with Neutral Current Coherent Neutrino-Nucleus Scattering,” A. J. Anderson, J. M. Conrad, E. Figueroa-Feliciano, C. Ignarra, G. Karagiorgi, K. Scholberg, M. H. Shaevitz, J. Spitz, arXiv: 1201.3805 [hep-ex], 2012, Phys. Rev. D 86, 013004, 2012.
- “Indication for the disappearance of reactor electron-antineutrinos in the Double Chooz experiment,” The Double Chooz Collaboration (Y. Abe, *et al.*), arXiv:1112.6353 [hep-ex], Phys. Rev. Lett., 108, 131801, 2012.
- “Improved Parameterization of K^+ Production at Low Energy Using Feynman Scaling,” C. Mariani, G. Cheng, J. M. Conrad, M. H. Shaevitz, arXiv:1110.0417 [hep-ex], Phys Rev D.84 114021, 2011.
- “Reactor Simulation for Antineutrino Experiments using DRAGON and MURE ,” C.L. Jones, A. Bernstein, J.M. Conrad, Z. Djurcic, M. Fallot, L. Giot, G. Keefer, A. Onillon, L. Winslow, arXiv:1109.5379 [nucl-ex], Phys. Rev. D 86, 012001, 2012.
- “Test of Lorentz and CPT violation with Short Baseline Neutrino Oscillation Excesses,” The MiniBooNE Collaboraton (A.A. Sguilar-Arevalo, *et al.*) [arXiv:1109.3480 [hep-ex]], Accepted to Phys. Lett. B, 2012.
- “Dual baseline search for muon neutrino disappearance at $0.5 \text{ eV}^2 < \Delta m^2 < 40 \text{ eV}^2$,” The SciBooNE and MiniBooNE Collaborations, (K.B.M. Mahn, *et al.*) arXiv:1106.5685 [hep-ex], Phys. Rev. D. 85, 032007, 2012.
- “Limits on Electron Neutrino Disappearance from the KARMEN and LSND electron neutrino - Carbon Cross Section Data,” J. M. Conrad and M. H. Shaevitz, arXiv:1106.5552 [hep-ex], Phys. Rev. D. 85, 013017, 2012.

- “Short-baseline Neutrino Oscillation Waves in Ultra-large Liquid Scintillator Detectors,” Sanjib Kumar Agarwalla, J.M. Conrad, M.H. Shaevitz, arXiv:1105.4984, J. of High Energy Physics, 12:085, 2011.
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- “Atmospheric Tau Neutrinos in a Multi-kiloton Liquid Argon Detector,” J. Conrad, A. de Gouvea, S. Shalgar, J. Spitz, arXiv:1008.2984. Phys. Rev. D 82, 093012, 2010.
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**Accelerator and Detector Physics and Technology,
Refereed Publications:**

- “Photodegradation Mechanisms of Tetraphenyl Butadiene Coatings for Liquid Argon Detectors,” B. J. P. Jones, J. K. VanGemert, J. M. Conrad, and A. Pla-Dalmau, Accepted to J. of Inst.
- “Benchmarking TPB-coated Light Guides for Liquid Argon TPC Light Detection Systems,” B. Baptista, L. Bugel, C. Chiu, J.M. Conrad, C.M. Ignarra B.J.P. Jones and T. Katori, arXiv:1210.3793. Submitted to Nuc. Inst. Meth.
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- “Simulations of Pion Production in the DAEALUS Target,” Adriana Bungau, Roger Barlow, Mike Shaevitz, Janet Conrad, Joshua Spitz, Tess Smidt, arXiv:1205.5528 [hep-ex]. 2012 IPAC Refereed Proceedings.
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**Selected Unrefereed Publications,
Proposals, Design Reports, Lecture Notes, Theses, Etc.:**

- “Light Sterile Neutrinos: A White Paper,” K. Abazajian, *et al.*, arXiv:1204.5379v1 [hep-ph], 2012.
- “Preliminary Design Study of High-Power H₂⁺ Cyclotrons for the DAE δ ALUS Experiment,” L. Calabretta *et al.*, arXiv:1107.0652 [physics.acc-ph], 2012.
- “A Study of Detector Configurations for the DUSEL CP Violation Searches Combining LBNE and DAE δ ALUS,” The DAE δ ALUS Collaboration (J. Alonso, *et al.*), arXiv:1008.4967 [hep-ex].
- “Expression of Interest for a Novel Search for CP Violation in the Neutrino Sector: DAE δ ALUS” (J. Alonso, *et al.*), arXiv:1006.0260 [physics.ins-det].
- “Expression of Interest for Neutrinos Scattering on Glass: NuSONG,” The NuSONG Collaboration (T. Adams, *et al.*), FERMILAB-PUB-09-386-AD-CMS-PPD, 2009.
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