Regina Abby Rameika
Particle Physics Division – Intensity Frontier Department
Fermi National Accelerator Laboratory
Batavia, Illinois 60510
(630)-840-2262
rameika@fnal.gov

Areas of Expertise :

Experimental elementary particle physics; neutrino oscillations; liquid argon detector technology; project management

Professional Employment

2008-present	Scientist III - Fermi National Accelerator Laboratory
1995-2008:	Scientist II - Fermi National Accelerator Laboratory
1990-1994:	Scientist I- Fermi National Accelerator Laboratory
1986-1990:	Associate Scientist - Fermi National Accelerator Laboratory
1982-1985:	Research Associate - Fermi National Accelerator Laboratory
1982:	Research Associate - University of Michigan

Education

1982:	Ph.D. in Physics, Rutgers University, New Brunswick, New Jersey
1976:	B.S. in Physics, Rutgers University, New Brunswick, New Jersey

Awards

2009:	Fermilab Employee Performance Recognition Award for LBNE Project preparation
2007:	Fermilab Employee Performance Recognition Award for Future Long Baseline Studies

2002:	Elected as an APS Fellow for "significant contributions to the Direct Observation of the Tau Neutrino"
2001:	Fermilab Employee Performance Recognition Award for contributions to the Direct Observation of the Nu Tau experiment (DONUT)

Professional Leadership Activities

2011-present	MicroBooNE Project Manager
2010-2011	LBNE Project Scientist
2008-2009	Acting Project Manager for the Long Baseline Neutrino Experiment (LBNE)
2005-2008	Fermilab Neutrino Department - Department Head
2006-2007	Co-leader of the BNL-FNAL Future Long Baseline Study
2002-2005	MINOS Detector Construction Project Manager
1994-2002	Key member of DONUT collaboration (Direct Observation of the Tau Neutrino)
1994-1998	Project Manager - NuMI/MINOS Project
1992-1995	Deputy Head - Fermilab Research Division
1988-1992	Co-spokesperson of FNAL-E800 : Precision Measurement of the Omega Minus Magnetic Moment
1987-1990	Associate Head – Research Division Site Operations Department
1986-1988	Deputy Spokesperson of E-756 : Measurement of the Polarization and Magnetic Moment of the Omega Minus Hyperon

Professional Service on Committees

2013	Member - Committee of Visitors, review of DOE Office of High Energy Physics; Chair of Projects sub-committee
2013	Member – HEPAP Facilities Sub-panel
2012 – 2013	Member – Fermilab Director's Search Committee
2012 – present	Member – Fermilab Wilson Fellowship Committee
2012	Co-Chair – Local organizing committee for NNN12 Workshop held at Fermilab (Next Generation Neutrino and Nucleon Decay)
2011 – 2013	Member High Energy Physics Advisory Panel (HEPAP)
2007	Co-Chair – Organizing Committee for Neutrino Physics Summer School held at Fermilab, July 2007
2001 -2002	Chairperson – Fermilab Committee on Scientific Appointments (FCSA)
2000	Member – FCSA

R. Rameika - Select Publications

Baseline optimization for the measurement of CP violation and mass hierarchy in a long-baseline neutrino oscillation experiment
Authors: M. Bass, M. Bishai, D. Cherdack, M. Diwan, J. Hernandez, B. Lundberg, X. Qian, R. Rameika, L. Whitehead, R.J. Wilson, E. Worcester, G. Zeller
arXiv:1311.0212[hep-ex]

Intensity Frontier Instrumentation

By S.H. Kettell, R.A. Rameika, R.S. Tschirhart
arXiv:1309.6704 [hep-ex].

First Measurements of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon
By ArgoNeuT Collaboration (C. Anderson et al.). Phys.Rev.Lett. 108 (2012) 161802

Measurement of low-energy neutrino cross-sections with the PEANUT experiment
By S. Aoki, A. Ariga, L. Arrabito, D. Autiero, M. Besnier, C. Bozza, S. Buontempo, E. Carrara et al.
New J.Phys. 12 (2010) 113028

Final tau-neutrino results from the DONuT experiment
By DONuT Collaboration (K. Kodama et al.)
Phys.Rev. D78 (2008) 052002

Observation of muon neutrino disappearance with the MINOS detectors and the NuMI neutrino beam
By MINOS Collaboration (D.G. Michael et al.)
Phys.Rev.Lett. 97 (2006) 191801

Identification of neutrino interactions using the DONUT spectrometer
By K. Kodama, C. Andreopoulos, N. Giokaris, N. Saoulidou, G. Tzanakos, B. Baller, D. Boehnlein, B. Lundberg et al.
Nucl.Instrum.Meth. A516 (2004) 21-33

Detection and analysis of tau neutrino interactions in DONUT emulsion target
By K. Kodama, M. Nakamura, N. Saoulidou, G. Tzanakos, B. Baller, B. Lundberg, R. Rameika, J.S. Song et al.
Nucl.Instrum.Meth. A493 (2002) 45-66

Observation of tau neutrino interactions
By DONUT Collaboration (K. Kodama et al.)
Phys.Lett. B504 (2001) 218-224

Polarization of Xi- and Omega- hyperons produced from neutral beams
D.M. Woods, P.M. Border, D.P. Ciampa, G. Guglielmo, Kenneth J. Heller,

N.B. Wallace, K.A. Johns, Y.T. Gao et al.
Phys.Rev. D54 (1996) 6610-6619

Precision measurement of the Omega- magnetic moment
By N.B. Wallace, P.M. Border, D.P. Ciampa, G. Guglielmo, Kenneth J. Heller, D.M. Woods, K.A. Johns, Y.T. Gao et al.
Phys.Rev.Lett. 74 (1995) 3732-3735

The Experiment 705 electromagnetic shower calorimeter
By E705 Collaboration (P. Ioannou et al.)
Nucl.Instrum.Meth. A332 (1993) 57-77

Polarization of omega- hyperons produced in 800-GeV proton - beryllium collisions
By K.B. Luk, C. James, R. Rameika, H.T. Deihl, S. Teige, G.B. Thomson, Y. Zou, P.M. Ho et al.
Phys.Rev.Lett. 70 (1993) 900-903

Precise measurement of the Xi- magnetic moment
By J. Duryea, G. Guglielmo, Kenneth J. Heller, K. Johns, M. Shupe, K. Thorne, C. James, K.B. Luk et al.
Phys.Rev.Lett. 68 (1992) 768-771

Measurement of the polarization and magnetic moment of Anti-xi+ anti-hyperons produced by 800-GeV/c protons
By P.M. Ho, M.J. Longo, A. Nguyen, K.B. Luk, C. James, R. Rameika, J. Duryea, G. Guglielmo et al.
Phys.Rev. D44 (1991) 3402-3418

Polarization of Xi- hyperons produced by 800-GeV protons
By J. Duryea, G. Guglielmo, Kenneth J. Heller, K. Johns, M. Shupe, K. Thorne, C. James, K.B. Luk et al.
Phys.Rev.Lett. 67 (1991) 1193-1196

Measurement of the Omega- magnetic moment
By H.T. Diehl, S. Teige, G.B. Thomson, Y. Zou, C. James, K.B. Luk, R. Rameika, P.M. Ho et al.
Phys.Rev.Lett. 67 (1991) 804-807

Production polarization and magnetic moment of anti-XI+ anti-

hyperons produced by 800-GeV/c protons
By P.M. Ho, M.J. Longo, A. Nguyen, K.B. Luk, C. James, R. Rameika, J. Duryea, G. Guglielmo et al.
Phys.Rev.Lett. 65 (1990) 1713-1716

Polarization in Inclusive Lambda and Lambda-bar Production at Large pT
By B. Lundberg, R. Handler, L. Pondrom, M. Sheaff, C. Wilkinson, J. Dworkin, O.E. Overseth, R. Rameika et al.
Phys.Rev. D40 (1989) 3557-3567

Measurements of Production Polarization and Decay Asymmetry for Xi- Hyperons
By R. Rameika, A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Whitman, P.T. Cox, E.C. Dukes et al.
Phys.Rev. D33 (1986) 3172-3179

Measurement Of The Xi- Magnetic Moment
By R. Rameika, A. Beretvas, L. Deck, T. Devlin, K.B. Luk, R. Whitman, P.T. Cox, C. Dukes et al.
Phys.Rev.Lett. 52 (1984) 581-584

Measurement of Electromagnetic Shower Position and Size with a Saturated Avalanche Tube Hodoscope and a Fine Grained Scintillator
By R. Rameika, B. Cox, Charles M. Jenkins, D.J. Judd, G. Hale, P.O. Mazur, C.T. Murphy, F. Turkot et al.
Nucl.Instrum.Meth. A236 (1985) 42, IEEE Trans.Nucl.Sci. 31 (1984) 60-63

A Measurement of the Energy Resolution and Related Properties of an Scg1-c Scintillation Glass Shower Counter Array for 1-GeV to 25-GeV Positrons
By D.E. Wagoner, B. Cox, D.J. Judd, G. Hale, P.O. Mazur, C.T. Murphy, R. Rameika, F. Turkot et al.
Nucl.Instrum.Meth. A238 (1985) 315, IEEE Trans.Nucl.Sci. 31 (1984) 53-56

The Polarization And Magnetic Moment Of The Sigma- Hyperon
By Leslie Ludwig Deck, A. Beretvas, T. Devlin, K.B. Luk, R. Rameika, R. Whitman, R. Handler, B. Lundberg et al..
Phys.Rev. D28 (1983) 1-20

Polarization of Sigma+ Hyperons Produced by 400-GeV Protons

By C. Wilkinson, R. Handler, B. Lundberg, L. Pondrom, M. Sheaff, P.T. Cox, C. Dukes, J. Dworkin et al.

Phys.Rev.Lett. 46 (1981) 803-806