

## Martin H. Israel -- Publications

### Refereed Papers

- J. H. Doede, R. H. Hildebrand, M. H. Israel and M. R. Pyka (1963) Moderation and absorption times of negative pions in liquid hydrogen. *Phys. Rev.* **129**, 2808-2811.
- J. H. Doede, R. H. Hildebrand, and M. H. Israel (1964) Moderation and absorption times for negative pions in liquid deuterium. *Phys. Rev.* **136**, B1609-B1614.
- M. H. Israel and R. E. Vogt (1968) The flux of cosmic ray electrons between 17 and 63 MeV. *Phys. Rev. Lett.* **20**, 1053-1056.
- M. H. Israel (1969) Cosmic-ray electrons between 12 MeV and 1 GeV in 1967. *J. Geophys. Res.* **74**, 4701-4713.
- M. H. Israel and R. E. Vogt (1969) Characteristics of the diurnally varying electron flux near the polar cap. *J. Geophys. Res.* **74**, 4714-4724.
- J. W. Epstein, J. I. Fernandez, M. H. Israel, J. Klarmann, R. A. Mewaldt, and W. R. Binns (1971) Large-area pulse ionization chamber for measurements of extremely heavy cosmic rays. *Nucl. Instr. & Meth.* **95**, 77-85.
- R. A. Mewaldt, J. I. Fernandez, M. H. Israel, J. Klarmann, and W. R. Binns (1973) Relativistic heavy cosmic rays. *Astrophys. and Space Sci.* **22**, 45-65.
- P. L. Love, J. Tueller, J. W. Epstein, M. H. Israel, and J. Klarmann (1977) Construction and performance of a large-area multi-wire ionization hodoscope for use in a cosmic-ray detector. *Nucl. Instr. & Meth.* **140**, 569-576.
- J. Tueller, P. L. Love, M. H. Israel, and J. Klarmann (1979) Cosmic-ray abundances of individual elements in the interval  $26 \leq Z \leq 30$ . *Astrophys. J.* **228**, 582-591.
- W. R. Binns, M. H. Israel, J. Klarmann, W. R. Scarlett, E. C. Stone, and C. J. Waddington (1981) The UH-nuclei cosmic ray detector on the third high energy astronomy observatory. *Nucl. Instr. Meth. Phys. Res.* **185**, 415-426.
- W. R. Binns, R. K. Fickle, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, and C. J. Waddington (1981) Cosmic-ray abundances of elements with atomic number  $26 \leq Z \leq 40$  measured on HEAO-3. *Astrophys. J.* **247**, L115-L118.
- W. R. Binns, R. K. Fickle, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone and C. J. Waddington (1982) The abundance of the actinides in the cosmic radiation as measured on HEAO-3. *Astrophys. J.* **261**, L117-L120.
- W. R. Binns, R. K. Fickle, T. L. Garrard, M. H. Israel, J. Klarmann, K. E. Krombel, E. C. Stone and C. J. Waddington (1983) Cosmic ray abundances of Sn, Te, Xe, and Ba nuclei measured on HEAO-3. *Astrophys. J.* **267**, L93-L96.
- J. H. Crane, D. D. Guo, M. H. Israel and J. Klarmann (1983) Interaction mean free path of cosmic ray Fe in air. *Astrophys. and Space Sci.* **94**, 201-209.
- J. H. Crane, M. H. Israel, J. Klarmann, J. F. Ormes and R. J. Protheroe (1983) Abundance of cosmic ray elements from sulfur to nickel as a function of atmospheric depth. *Astrophys. and Space Sci.* **94**, 211-222.
- W. R. Binns, M. H. Israel, and J. Klarmann (1983) Scintillator-fiber charged-particle track-imaging detector. *Nucl. Instr. & Meth. Phys. Res.* **216**, 475-480.

- W. R. Binns, N. R. Brewster, D. J. Fixsen, T. L. Garrard, M. H. Israel, J. Klarmann, B. J. Newport, E. C. Stone, and C. J. Waddington (1985) Lead, platinum, and other heavy elements in the primary cosmic radiation - HEAO-3 results. *Astrophys. J.* **297**, 111-118.
- W. R. Binns, J. J. Connell, P. F. Dowkontt, J. W. Epstein, M. H. Israel, and J. Klarmann (1986) A scintillating optical fiber track imaging detector. *Nucl. Instr. Meth. Phys. Res.* **A251**, 402-406.
- M. H. Israel (1987) Autosomal suppressor gene for Fragile-X: An hypothesis. *Am. J. Med. Genetics* **26**, 19-31.
- W. R. Binns, T. L. Garrard, M. H. Israel, M. P. Kertzman, J. Klarmann, E. C. Stone and C. J. Waddington (1987) Systematics of the release of residual nuclei from relativistic nucleus-nucleus interactions. *Phys. Rev. C* **36**, 1870-1885.
- W. R. Binns, T. L. Garrard, M. H. Israel, M. D. Jones, M. P. Kamionkowski, J. Klarmann, E. C. Stone, and C. J. Waddington (1988) Cosmic ray energy spectra between ten and several hundred GeV/amu for elements from  $^{18}\text{Ar}$  to  $^{28}\text{Ni}$  – Results from HEAO-3. *Astrophys. J.* **324**, 1106-1117.
- W. R. Binns, T. L. Garrard, P. S. Gibner, M. H. Israel, M. P. Kertzman, J. Klarmann, B. J. Newport, E. C. Stone, and C. J. Waddington (1989) The abundances of ultraheavy elements in the cosmic radiation: results from HEAO-3. *Astrophys. J.* **346**, 997-1009.
- W. R. Binns, J. R. Cummings, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, and C. J. Waddington (1989) Charge, mass, and energy changes during fragmentation of relativistic nuclei. *Phys. Rev. C* **39**, 1785-1798.
- A. J. Davis, P. L. Hink, W. R. Binns, J. W. Epstein, J. J. Connell, M. H. Israel, J. Klarmann, V. Vylet, D. H. Kaplan, and S. Reucroft S. (1989) Scintillating optical fiber trajectory detectors. *Nucl. Instr. Meth. Phys. Res. A* **276**, 347-358.
- J. R. Cummings, W. R. Binns, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, and C. J. Waddington (1990) Determination of the cross sections for the production of fragments from relativistic nucleus-nucleus interactions. I. Measurements. *Phys. Rev. C* **42**, 2508-2529.
- J. R. Cummings, W. R. Binns, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, and C. J. Waddington (1990) Determination of the cross sections for the production of fragments from relativistic nucleus-nucleus interactions. II. Parametric fits. *Phys. Rev. C* **42**, 2530-2545.
- J. J. Connell, W. R. Binns, P. F. Dowkontt, J. W. Epstein, M. H. Israel, J. Klarmann, W. R. Webber, and J. C. Kish (1990) The scintillating optical fiber isotope experiment: Bevalac calibrations of test models. *Nucl. Instr. and Meth. Phys. Res.* **A294**, 335-350.
- S. M. Niebur, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, and N. E. Yanasak (2000) Secondary Electron-Capture-Decay Isotopes and Implications for the Propagation of Galactic Cosmic Rays. *Acceleration and Transport of Energetic Particles Observed in the Heliosphere: ACE 2000 Symposium*, ed. R. A. Mewaldt et al, AIP Conference Proceedings 528, 406-409.
- S. H. Sposato, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, P. L. Hink, M. H. Israel, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, R. E. Streitmatter, C. J. Waddington (2000) Co/Ni Element Ratio in the Galactic Cosmic Rays between 0.8 and 4.3 GeV/nucleon. *Acceleration and Transport of Energetic Particles Observed in the Heliosphere: ACE 2000 Symposium*, ed. R. A. Mewaldt et al, AIP Conference Proceedings **528**, 433-436.
- N. E. Yanasak, M. E. Wiedenbeck, R. A. Mewaldt, A. J. Davis, A. C. Cummings, J. S. George, R. A. Leske, E. C. Stone, E. R. Christian, T. T. von Roseninge, W. R. Binns, P. L. Hink, and M. H. Israel

- (2001) Measurement of the Secondary Radionuclides  $^{10}\text{Be}$ ,  $^{26}\text{Al}$ ,  $^{36}\text{Cl}$ ,  $^{54}\text{Mn}$ , and  $^{14}\text{C}$  and Implications for the Galactic Cosmic-Ray Age. *Astrophys. J.* **563**, 768-792.
- N. E. Yanasak, M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, and T. T. von Rosenvinge (2001) Cosmic-Ray Time Scales Using Radioactive Clocks. *Adv. Space Res.* **27**, 727-736.
- W. R. Binns, M. E. Wiedenbeck, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and N. E. Yanasak (2001) Galactic Cosmic Ray Neon Isotopic Abundances Measured by the Cosmic Ray Isotope Spectrometer (CRIS) on ACE. *Adv. Space Res.* **27**, 767-772.
- M. E. Wiedenbeck, W. R. Binns, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and N. E. Yanasak (2001) The Isotopic Source Composition of Cosmic-Ray Iron, Cobalt, and Nickel. *Adv. Space Res.* **27**, 773-778.
- M. E. Wiedenbeck, N. E. Yanasak, A. C. Cummings, A. J. Davis, J. S. George, R. A. Leske, R. A. Mewaldt, E. C. Stone, W. R. Binns, P. L. Hink, M. H. Israel, M. Lijowski, E. R. Christian, and T. T. von Rosenvinge (2001) The Origin of Primary Cosmic Rays: Constraints from ACE Elemental and Isotopic Composition Observations. *Space Sci. Rev.* **99**, 15-26.
- N. E. Yanasak, G. A. de Nolfo, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and M. E. Wiedenbeck (2001) The Cosmic-Ray Contribution to Galactic Abundances of the Light Elements: Interpretation of GCR LiBeB Abundance Measurements from ACE/CRIS. *Solar and Galactic Composition*, ed. R. F. Wimmer-Schweingruber, AIP Conference Proceedings **598**, 245-250.
- G. A. de Nolfo, N. E. Yanasak, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and M. E. Wiedenbeck (2001) Measurements of the Isotopes of Lithium, Beryllium, and Boron from ACE/CRIS. *Solar and Galactic Composition*, ed. R. F. Wimmer-Schweingruber, AIP Conference Proceedings **598**, 251-255.
- M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and N. E. Yanasak (2001) Constraints on the Nucleosynthesis of Refractory Nuclides in Galactic Cosmic Rays. *Solar and Galactic Composition*, ed. R. F. Wimmer-Schweingruber, AIP Conference Proceedings **598**, 269-274.
- W. R. Binns, M. E. Wiedenbeck, E. R. Christian, A. C. Cummings, J. S. George, M. H. Israel, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and N. E. Yanasak (2001) GCR Neon Isotopic Abundances: Comparison with Wolf-Rayet Star Models and Meteoritic Abundances. *Solar and Galactic Composition*, ed. R. F. Wimmer-Schweingruber, AIP Conference Proceedings **598**, 257-262.
- K. Rielage, K. Arisaka, M. Atac, W. R. Binns, J. J. Christl, P. Dowkontt, J. W. Epstein, P. L. Hink, M. H. Israel, D. Leopold, G. N. Pendleton, and D. B. Wallace (2001) Characterization of a Multianode Photomultiplier Tube for Use with Scintillating Fibers. *Nucl. Instr. and Meth. Phys. Res.* **A463**, 149-160.
- S. M. Niebur, L. M. Scott, M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, and N. E. Yanasak (2003) Cosmic-Ray Energy Loss in the Heliosphere: Direct

- Evidence from Electron-Capture-Decay Secondary Isotopes. *J. Geophys. Res. – Space Phys.* **108**(A10), 8033-8041.
- M. H. Israel, W. R. Binns, A. C. Cummings, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, M. E. Wiedenbeck (2005) Isotopic Composition of Cosmic Rays: Results from the Cosmic Ray Isotope Spectrometer on the ACE Spacecraft. *Nucl. Phys. A* **758**, 201c-208c.
- W. R. Binns, M. E. Wiedenbeck, M. Arnould, A. C. Cummings, J. S. George, S. Goriely, M. H. Israel, R. A. Leske, R. A. Mewaldt, G. Meynet, L. M. Scott, E. C. Stone, and T. T. von Rosenvinge, (2006) Superbubbles, Wolf-Rayet Stars, and the Origin of Galactic Cosmic Rays, *Journal of Physics: Conference Series* **47** 68-77.
- W. R. Binns, M. E. Wiedenbeck, M. Arnould, A. C. Cummings, J. S. George, S. Goriely, M. H. Israel, R. A. Leske, R. A. Mewaldt, G. Meynet, L. M. Scott, E. C. Stone, and T. T. von Rosenvinge (2005) Cosmic Ray Neon, Wolf-Rayet Stars, and the Superbubble Origin of Galactic Cosmic Rays”, *Astrophys. J.* **634**, 351-364.
- S. Geier, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. deNolfo, P. L. Hink, M. H. Israel, A. W. Labrador, J. T. Link, R. A. Mewaldt, J. W. Mitchell, B. R. Rauch, S. M. Schindler, L. M. Scott, E. C. Stone, R. E. Streitmatter, & C. J. Waddington (2006) [A Search for the Signature of Microquasars in the Cosmic Ray Iron Spectrum Measured by TIGER](#), *Advances in Space Research*, **37** (10) 1955–1959.
- S. W. Barwick, J. J. Beatty, D. Z. Besson, W. R. Binns, B. Cai, J. M. Clem, A. Connolly, D. F. Cowen, P. F. Dowkontt, M. A. DuVernois, P. A. Evenson, D. Goldstein, P. W. Gorham, C. L. Hebert, M. H. Israel, J. G. Learned, K. M. Liewer, J. T. Link, S. Matsuno, P. Miočinić, J. Nam, C. J. Naudet, R. Nichol, K. Palladino, M. Rosen, D. Saltzberg, D. Seckel, A. Silvestri, B. T. Stokes, G. S. Varner, and F. Wu (2006) Constraints on Cosmic Neutrino Fluxes from the Antarctic Impulsive Transient Antenna Experiment, *Phys. Rev. Lett.* **96**, 171101-1-4.
- W. R. Binns, M. E. Wiedenbeck, M. Arnould, A. C. Cummings, J. S. George, S. Goriely, M. H. Israel, R. A. Leske, R. A. Mewaldt, G. Meynet, L. M. Scott, E. C. Stone, and T. T. von Rosenvinge (2006) Wolf Rayet Stars, OB Associations, and the Origin of Cosmic Rays, *New Astron. Revs.* **50**, 516.
- M.E. Wiedenbeck, W.R. Binns, A.C. Cummings, A.J. Davis, G.A. deNolfo, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, & T.T. Rosenvinge (2007) An Overview of the Origin of Galactic Cosmic Rays as Inferred from Observations of Heavy Ion Composition and Spectra, *Space Science Reviews*, **130**, 415.
- W.R. Binns, M.E. Wiedenbeck, M. Arnould, A.C. Cummings, J.S. George, S. Goriely, M.H. Israel, R.A. Leske, R.A. Mewaldt, G. Meynet, L.M. Scott, E.C. Stone, & T T. von Rosenvinge, OB Associations, Wolf–Rayet Stars, and the Origin of Galactic Cosmic Rays (2007) *Space Science Reviews*, **130** 439
- P.W. Gorham, S.W. Barwick, J.J. Beatty, D.Z. Besson, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, P.W. Dowkontt, M.A. DuVernois, R.C. Field, D.J. Goldstein, A. Goodhue, C. Hast, C.L. Hebert, S. Hoover, M.H. Israel, J. Kowalski, J.G. Learned, K.M. Liewer, J.T. Link, E. Luszczyk, S. Matsuno, B. Mercurio, C. Miki, P. Miocinovic, J. Nam, C.J. Naudet, J. Ng, R. Nichol, K. Reil, K. Palladino, K. Reil, A. Romero-Wolfe, M. Rosen, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, D. Walz, F. Wu (2007) Observations of the Askaryan Effect in Ice, *Phys. Rev. Lett.* **99** 171101-1-5.
- W.R. Binns, M.E. Wiedenbeck, M. Arnould, A.C. Cummings, G.A. de Nolfo, S. Goriely, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, & T.T. von Rosenvinge (2008) The OB-Association Origin of Galactic Cosmic Rays, *New Astronomy Reviews* **52** 427.

- J.P. Wefel, et al (too many collaborating “authors” to list) (2008) The CALET Space Observatory for JEM-EF on the International Space Station, in *Astroparticle, Particle, and Space Physics, Detectors, and Medical Physics Applications*, Proc. of 10<sup>th</sup> Conf., Ed. M. Barone, A. Gaddi, C. Leron, L. Price, P. Rancoita, and R. Ruchti, World Scientific Pub. Co. 991.
- R.C. Ogliore, E.C. Stone, R.A. Leske, R.A. Mewaldt, M.E. Wiedenbeck, W.R. Binns, M.H. Israel, T.T. von Rosenvinge, G.A. de Nolfo & I.V. Moskalenko (2009) The Phosphorus, Sulfur, Argon, and Calcium Isotopic Composition of the Galactic Cosmic Ray Source, *Astrophys. J.* **695** 666-678.
- B.F. Rauch, J.T. Link, K. Lodders, M.H. Israel, L.M. Barbier, W.R. Binns, E.R. Christian, J.R. Cummings, G.A. deNolfo, S. Geier, R.A. Mewaldt, J.W. Mitchell, S.M. Schindler, L.M. Scott, E.C. Stone, R.E. Streitmatter, C.J. Waddington, & M.E. Wiedenbeck (2009) Cosmic-Ray Origin in OB Associations and Preferential Acceleration of Refractory Elements: Evidence from Abundances of Elements  $^{26}\text{Fe}$  through  $^{34}\text{Se}$ , *Astrophys. J.* **697**, 2083-2088. Erratum (2010) *Astrophys. J.* **722**, 970.
- J.S. George, K.A. Lave, M.E. Wiedenbeck, W.R. Binns, A.C. Cummings, A.J. Davis, G.A. deNolfo, P.L. Hink, M.H. Israel, R.A. Leske, R.A. Mewaldt, L.M. Scott, E.C. Stone, T.T. von Rosenvinge, and N.E. Yanasak (2009) Elemental Composition and Energy Spectra of Galactic Cosmic Rays During Solar Cycle 23, *Astrophys. J.* **698**, 1666-1681.
- P.W. Gorham, P. Allison, S.W. Barwick, J.J. Beatty, D.Z. Besson, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, P.F. Dowkontt, M.A. DuVernois, R.C. Field, D.J. Goldstein, A. Goodhue, C. Hast, C.L. Hebert, S. Hoover, M.H. Israel, J. Kowalski, J.G. Learned, K.M. Liewer, J.T. Link, E. Luszczek, S. Matsuno, B. Mercurio, C. Miki, P. Miocinovic, J. Nam, C.J. Naudet, J. Ng, R. Nichol, K. Palladino, K. Reil, A. Romero-Wolfe, M. Rosen, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, D. Walz, Y. Wang, F. Wu (2009) The Antarctic Impulsive Transient Antenna Ultra-high Energy Neutrino Detector: Design, Performance, and Sensitivity for the 2006-07 Balloon Flight, *Astroparticle Phys.* **32**, 10-41.
- P.W. Gorham, P. Allison, S.W. Barwick, J.J. Beatty, D.Z. Besson, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, P.F. Dowkontt, M.A. DuVernois, R.C. Field, D.J. Goldstein, A. Goodhue, C. Hast, C.L. Hebert, S. Hoover, M.H. Israel, J. Kowalski, J.G. Learned, K.M. Liewer, J.T. Link, E. Luszczek, S. Matsuno, B. Mercurio, C. Miki, P. Miocinovic, J. Nam, C.J. Naudet, J. Ng, R. Nichol, K. Palladino, K. Reil, A. Romero-Wolfe, M. Rosen, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, D. Walz, Y. Wang, F. Wu (2009) New Limits on the Ultrahigh Energy Cosmic Neutrino Flux from the ANITA Experiment, *Phys. Rev. Lett.* **103**, 051103-1-5.
- P.W. Gorham, P. Allison, B.M. Baughman, J.J. Beatty, K. Belov, D.Z. Besson, S. Bevan, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, M. Detrixhe, D. DeMarco, P.F. Dowkontt, M.A. DuVernois, E.W. Grashorn, B. Hill, S. Hoover, M. Huang, M.H. Israel, A. Javaid, K.M. Liewer, S. Matsuno, B. Mercurio, C. Miki, M. Mottram, J. Nam, R.J. Nichol, K. Palladino, A. Romero-Wolfe, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, A.G. Viereg, Y. Wang, (2010) Observational Constraints on the Ultra-high Energy Cosmic Neutrino Flux from the Second Flight of the ANITA Experiment, *Phys. Rev. D.* **82**, 022004. [Erratum (2012) *Phys. Rev. D.* **82**, 049901(E)]
- S. Hoover, J. Nam, P.W. Gorham, E. Grashorn, P. Allison, S.W. Barwick, J.J. Beatty, K. Belov, D.Z. Besson, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, P.F. Dowkontt, M.A. DuVernois, R.C. Field, D. Goldstein, C. Hast, M.H. Israel, A. Javaid, J. Kowalski, J.G. Learned, K.M. Liewer, J.T. Link, E. Luszczek, S. Matsuno, B. Mercurio, C. Miki, P. Miocinovic, C.J. Naudet, J. Ng, R.J. Nichol, K. Palladino, K. Reil, A. Romero-Wolfe, M. Rosen, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, A.G. Viereg, D. Walz, F. Wu, (2010) Observation of Ultra-high-energy Cosmic Rays with the ANITA Balloon-borne Radio Interferometer, *Phys. Rev. Lett.* **105**, 151101-1-5.

- R.A. Mewaldt, A.J. Davis, K.A. Lave, R.A. Leske, E.C. Stone, M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, G.A. deNolfo, M.H. Israel, A.W. Labrador, & T.T. vonRosenvinge, (2010) Record-Setting Cosmic-Ray Intensities in 2009 and 2010. *Astrophys. J. Lett.* **723**, L1-L6.
- M. Detrixhe, D. Besson, P.W. Gorham, P. Allison, B. Baughman, J.J. Beatty, K. Belov, S. Bevan, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, D. DeMarco, P.F. Dowkontt, M.A. DuVernois, C. Frankenfeld, E.W. Grashorn, N. Griffith, B. Hill, D.P. Hogan, S. Hoover, M.H. Israel, A. Javaid, K.M. Liewer, S. Matsuno, B.C. Mercurio, C. Miki, M. Mottram, J. Nam, R.J. Nichol, K. Palladino, A. Romero-Wolfe, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, A.G. Viereg, Y. Wang, (2011) Ultrarelativistic Magnetic Monopole Search with the ANITA-II Balloon-Borne Radio Interferometer, *Phys. Rev. D.* **83**, 023513-1-11.
- A.G. Viereg, K. Palladino, P. Allison, B.M. Baughman, J.J. Beatty, K. Belov, D.Z. Besson, S. Bevan, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, M. Detrixhe, D. DeMarco, P.F. Dowkontt, M.A. DuVernois, P.W. Gorham, E. Grashorn, B. Hill, S. Hoover, M. Huang, M.H. Israel, A. Javaid, K.M. Liewer, S. Matsuno, B.C. Mercurio, C. Miki, M. Mottram, J. Nam, R.J. Nichol, A. Romero-Wolfe, L. Ruckman, D. Saltzberg, D. Seckel, G.S. Varner, Y. Wang, (2011) The First Limits on the Ultra-High Energy Neutrino Fluence from Gamma-Ray Bursts, *Astrophys. J.* **736**, 50(4pp).
- M. H. Israel (2012) Cosmic rays: 1912-2012, (An invited feature article) *Eos Trans. AGU* **93** (39), 373, doi:10.1029/2012EO3900001
- P.W. Gorham, A. Connolly, P. Allison, J.J. Beatty, K. Belov, D.Z. Besson, W.R. Binns, P. Chen, J.M. Clem, S. Hoover, M.H. Israel, J. Nam, D. Saltzberg, G.S. Varner, A.G. Viereg (2012) Implications of Ultrahigh Energy Neutrino Flux Constraints for Lorentz-Invariance Violating Cosmogenic Neutrinos, *Phys. Rev. D* **86**, 103006-1-7.
- K.A. Lave, M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, A.J. Davis, G.A. de Nolfo, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, and T.T. von Rosenvinge (2013) Galactic Cosmic-Ray Energy Spectra and Composition During the 2009-2010 Solar Minimum Period, *Astrophys. J.* **770**, 117-132.
- W.R. Binns, R.G. Bose, D.L. Braun, T.J. Brandt, W.M. Daniels, P.F. Dowkontt, S.P. Fitzsimmons, D.J. Hanne, T. Hams, M.H. Israel, J. Klemic, A.W. Labrador, J.T. Link, R.A. Mewaldt, J.W. Mitchell, P. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, K. Sakai, F. SanSebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, J.E. Ward, and M.E. Wiedenbeck (2014) The SuperTIGER Instrument Measurement of Elemental Abundances of Ultra-Heavy Galactic Cosmic Rays, *Astrophys. J.*, **788**, 18 (11pp).
- Invited Reviews**
- M.H. Israel, P.B. Price, & C.J. Waddington (1975) Ultraheavy cosmic rays. *Physics Today* **28** (5) 23-30 . Reprinted in *Astrophysics Today*, A. G. W. Cameron, editor, American Institute of Physics, (1984), 240-246.
- M.H. Israel (1981) Ultraheavy cosmic rays -- HEAO-3 results. *17th International Cosmic Ray Conference*, **12**, 53-65.
- M.H. Israel (1983) Significance of ultraheavy cosmic rays. In *Composition and Origin of Cosmic Rays*, M. M. Shapiro, ed., (Reidel), 47-64.
- M.H. Israel (1983) Detectors of ultraheavy cosmic rays. In *Composition and Origin of Cosmic Rays*, M. M. Shapiro, ed., (Reidel), 291-300.
- W.R. Binns, D.J. Fixsen, T.L. Garrard, M.H. Israel, J. Klarmann, E.C. Stone, & C.J. Waddington (1984) Elemental abundances of ultraheavy cosmic rays. *Advances in Space Research* **4**, No. 2-3, 25-34.

- M.H. Israel (1986) Abundances in cosmic rays. In *12th Texas Symposium on Relativistic Astrophysics*, 1984, M. Livio and G. Shaviv, eds., *Ann. NY Acad. Sci.* **470**, 188-204.
- W.R. Binns, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, and C. J. Waddington (1989) The Abundances of the Heavier Elements in the Cosmic Radiation. In *Cosmic Abundances of Matter*, C. J. Waddington, ed., *AIP Conf. Proc.* **183**, 147-167.
- W.H. Danforth and M.H. Israel (1995) The university as an agent of innovation. *Reinventing the Research University: Proceedings of a Symposium Held at UCLA on June 22-23, 1994*, C.K.Patel, editor, UCLA Office of the Vice Chancellor for Research, 199-206.
- M.H. Israel (2014) An Alternative Approach to Understanding the Observed Positron Fraction. . (Invited paper at the 33<sup>rd</sup> *International Cosmic Ray Conference*, Rio de Janeiro July 2013.) *Brazilian Journal of Physics* DOI: 10.1007/s13538-014-0235-5

### Contributed Conference Papers

- R.A. Mewaldt, R.E. Turner, M.W. Friedlander, & M.H. Israel (1970) The propagation of very heavy primary cosmic ray particles. *Proc. 11th International Cosmic Ray Conference. Acta Physica Hungaricae*, **24**, 433 (Budapest).
- J. I. Fernandez, M. H. Israel, J. Klarmann, R. A. Mewaldt, and W. R. Binns (1971) Observation of VH and VVH cosmic rays with an ionization-Cerenkov detector system. *Proc. 12th International Conference on Cosmic Rays, 1*, 260, (Hobart, Tasmania).
- R. C. Maehl, M. H. Israel and J. Klarmann (1973) Mean isotopic composition of cosmic rays with  $12 \leq Z \leq 26$  at 2.7 to 3.0 GV. *13th International Cosmic Ray Conference, 1*, 115 (Denver).
- M. H. Israel, J. Klarmann, R. C. Maehl, and W. R. Binns (1973) Energy spectra of individual cosmic-ray elements with  $12 \leq Z \leq 28$ . *13th International Cosmic Ray Conference, 1*, 255.
- W. R. Binns, J. I. Fernandez, M. H. Israel, J. Klarmann, R. C. Maehl, and R. A. Mewaldt (1973) Chemical composition of cosmic rays with  $Z > 30$  and  $E = 325$  MeV/N. *13th International Cosmic Ray Conference, 1*, 260.
- J. C. Benegas, M. H. Israel, J. Klarmann, and R. C. Maehl (1975) Charge and energy spectra of heavy cosmic rays. *14th International Cosmic Ray Conference, 1*, 251 (Munich).
- J. C. Benegas, M. H. Israel, J. Klarmann, and R. C. Maehl (1975) Mean isotopic composition of cosmic ray iron at intermediate energies. *14th International Cosmic Ray Conference, 1*, 379.
- J. C. Benegas, M. H. Israel, J. Klarmann, and R. C. Maehl (1975) On the interpretation of observed data from C-dE/dx detectors. *14th International Cosmic Ray Conference, 9*, 3172.
- J. Tueller, P. Love, J. W. Epstein, M. H. Israel, and J. Klarmann (1977) VH cosmic ray measurements with a 6.6 m<sup>2</sup>sr electronic detector. *15th International Cosmic Ray Conf, 1*, 254 (Plovdiv).
- P. Love, J. Tueller, J. W. Epstein, M. H. Israel, and J. Klarmann (1977) Ultra heavy cosmic measurements with a 6.6 m<sup>2</sup>sr electronic detector. *15th Intl. Cosmic Ray Conf., 1*, 258.
- M. H. Israel, J. Klarmann, P. L. Love, and J. Tueller (1979) Abundances and energy spectra of individual iron-secondary elements. *16th International Cosmic Ray Conference, 1*, 323.
- M. H. Israel, J. Klarmann, P. L. Love, and J. Tueller (1979) Cosmic-ray abundances in the interval  $26 \leq Z \leq 40$ . *16th International Cosmic Ray Conf, 65* (Kyoto).
- J. Klarmann, W. R. Binns, M. H. Israel, R. K. Fickle, C. J. Waddington, T. L. Garrard, and E. C. Stone (1981) Abundances of cosmic ray nuclei for  $26 \leq Z \leq 40$  from the HEAO-3 heavy nuclei experiment. *17th International Cosmic Ray Conference 2*, 13 (Paris).

- M. H. Israel, J. Klarmann, W. R. Binns, R. K. Fickle, C. J. Waddington, T. L. Garrard, and E. C. Stone (1981) Implications of ultraheavy cosmic-ray source composition derived from observations by the HEAO-3 heavy nuclei experiment. *17th Intl. Cosmic Ray Conf.*, **2**, 36.
- C.J. Waddington, R.K. Fickle, T.L. Garrard, E.C. Stone, W.R. Binns, M.H. Israel, & J. Klarmann (1981) Abundances of cosmic ray nuclei heavier than  $_{50}\text{Sn}$ . *17th International Cosmic Ray Conference*, **9**, 109.
- W. R. Binns, M. H. Israel and J. Klarmann (1983) Scintillator fiber charged-particle track imaging detector. *18th International Cosmic Ray Conference*, **8**, 89 (Bangalore).
- W. R. Binns, D. P. Grossman, M. H. Israel, M. D. Jones, J. Klarmann, T. L. Garrard, E. C. Stone, R. K. Fickle and C. J. Waddington (1983) Cosmic ray elemental abundances for  $26 \leq Z \leq 42$  measured on HEAO-3. *18th International Cosmic Ray Conference*, **9**, 106.
- E. C. Stone, T. L. Garrard, K. E. Krombel, W. R. Binns, M. H. Israel, J. Klarmann, N. R. Brewster, R. K. Fickle, and C. J. Waddington (1983) Cosmic ray abundances of the even charge elements from  $_{50}\text{Sn}$  to  $_{58}\text{Ce}$  measured on HEAO-3. *18th Intl. Cos. Ray Conf.*, **9**, 115.
- D. J. Fixsen, C. J. Waddington, W. R. Binns, M. H. Israel, J. Klarmann, T. L. Garrard, B. J. Newport, and E. C. Stone (1983) The cosmic ray abundances of the platinum-lead elements as measured on HEAO-3. *18th International Cosmic Ray Conference*, **9**, 119.
- M. H. Israel, M. D. Jones, J. Klarmann, W. R. Binns, T. L. Garrard, E. C. Stone, R. K. Fickle and C. J. Waddington (1983) Energy spectra of ultraheavy cosmic rays – results from HEAO-3. *18th International Cosmic Ray Conference*, **9**, 123.
- N. R. Brewster, R. K. Fickle, C. J. Waddington, W. R. Binns, M. H. Israel, M. D. Jones, J. Klarmann, T. L. Garrard, B. J. Newport, and E. C. Stone (1983) Interactions of 200 GeV gold nuclei in light elements. *18th International Cosmic Ray Conference*, **9**, 259.
- J. Klarmann, W. R. Binns, M. H. Israel, S. H. Margolis, T. L. Garrard, E. C. Stone, N. R. Brewster, D. J. Fixsen and C. J. Waddington (1983) Abundances of 'secondary' elements among the ultraheavy cosmic rays - results from HEAO-3. *18th International Cosmic Ray Conference*, **9**, 279.
- M. H. Israel, W. R. Binns, D. P. Grossman, J. Klarmann, S. H. Margolis, E. C. Stone, T. L. Garrard, K. E. Krombel, N. R. Brewster, R. K. Fickle and C. J. Waddington (1983) Correlation of source abundances of ultraheavy cosmic rays with first ionization potential - results from HEAO-3. *18th International Cosmic Ray Conference*, **9**, 305.
- T. L. Garrard, B. J. Newport, E. C. Stone, W. R. Binns, M. H. Israel, M. D. Jones, J. Klarmann, R. K. Fickle, and C. J. Waddington (1983) The non- $Z^2$  response of the heavy nuclei cosmic ray detector on HEAO-3. *18th International Cosmic Ray Conference*, **9**, 367.
- S. D. Barthelmy, M. H. Israel, J. Klarmann and J. W. Vogel (1983) Use of relativistic rise in ionization chambers for measurement of high energy heavy nuclei. *18th International Cosmic Ray Conference*, **9**, 371.
- S. D. Barthelmy, M. H. Israel and J. Klarmann (1985) Relative abundances of elements ( $20 \leq Z \leq 28$ ) at energies up to 70 GeV/amu using relativistic rise in ion chambers. *19th International Cosmic Ray Conference*, **2**, 24 (San Diego).
- W. R. Binns, J. J. Connell, M. H. Israel and J. Klarmann (1985) Bevalac calibration of the SOFIE range and hodoscope detectors. *19th International Cosmic Ray Conference*, **3**, 272.



- M. D. Jones, J. Klarmann, E. C. Stone, C. J. Waddington, W. R. Binns, T. L. Garrard and M. H. Israel (1985) Energy spectra of elements with  $18 \leq Z \leq 28$  between 10 and 300 GeV/amu. *19th International Cosmic Ray Conference*, **2**, 28.
- B. J. Newport, E. C. Stone, C. J. Waddington, W. R. Binns, T. L. Garrard, M. H. Israel and J. Klarmann (1985) Elemental abundances of cosmic rays with  $Z > 33$  measured on HEAO-3. *19th International Cosmic Ray Conference*, **2**, 123.
- J. Klarmann, S. H. Margolis, E. C. Stone, C. J. Waddington, W. R. Binns, T. L. Garrard, M. H. Israel and M. P. Kertzman (1985) Abundances of 'Secondary' elements among the ultraheavy cosmic rays - results from HEAO-3. *19th Intl. Cosmic Ray Conference*, **2**, 127.
- C. J. Waddington, W. R. Binns, N. R. Brewster, D. J. Fixsen, T. L. Garrard, M. H. Israel, J. Klarmann, B. J. Newport and E. C. Stone (1985) Lead, platinum and other heavy elements in the primary cosmic radiation -- HEAO-3 results. *19th Intl. Cosmic Ray Conf.*, **9**, 527.
- W. R. Binns, T. L. Garrard, M. H. Israel, J. Klarmann, S. H. Margolis, E. C. Stone and C. J. Waddington (1985) Implications of source abundances of ultraheavy cosmic rays. *19th International Cosmic Ray Conference*, **3**, 13.
- M. P. Kertzman, J. Klarmann, B. J. Newport, E. C. Stone, C. J. Waddington, W. R. Binns, T. L. Garrard and M. H. Israel (1985) Interaction of heavy nuclei, Kr, Xe and Ho, in light targets. *19th International Cosmic Ray Conference*, **3**, 95.
- B. J. Newport, E. C. Stone, C. J. Waddington, W. R. Binns, D. J. Fixsen, T. L. Garrard, G. Grimm, M. H. Israel and J. Klarmann (1985) The response of ionization chambers to relativistic heavy nuclei. *19th International Cosmic Ray Conference*, **3**, 287.
- M. A. Green, G. F. Smoot, R. L. Golden, M. H. Israel, R. Kephart, R. Niemann, R. A. Mewaldt, J. F. Ormes, P. Spillantini and M. E. Wiedenbeck (1987) ASTROMAG: A superconducting particle astrophysics magnet facility for the Space Station. *IEEE Transactions on Magnetics* **23**, 1240.
- M. H. Israel, M. D. Jones, M. P. Kamionkowski, J. Klarmann, E. C. Stone, C. J. Waddington, W. R. Binns and T. L. Garrard (1987) Cosmic-ray energy spectra between ten and several hundred GeV/amu for elements between Ar and Ni -- results from HEAO-3. *20th International Cosmic Ray Conference*, **1**, 330 (Moscow).
- T. L. Garrard, P. S. Gibner, M. H. Israel, J. Klarmann, C. J. Waddington and W. R. Binns (1987) Anisotropy of galactic iron of energy 3 to 500 GeV/amu measured by HEAO-3. *20th International Cosmic Ray Conference*, **1**, 348.
- E. C. Stone, C. J. Waddington, W. R. Binns, T. L. Garrard, P. S. Gibner, M. H. Israel, M. P. Kertzman, J. Klarmann and B. J. Newport (1987) Abundances of ultraheavy elements in the cosmic radiation. *20th International Cosmic Ray Conference*, **1**, 336.
- C. J. Waddington, W. R. Binns, J. R. Cummings, T. L. Garrard, P. S. Gibner, M. H. Israel, M. P. Kertzman and J. Klarmann (1987) Energy dependence of fragmentation cross-sections of relativistic heavy nuclei. *20th International Cosmic Ray Conference*, **2**, 149.
- C. J. Waddington, W. R. Binns, T. L. Garrard, M. H. Israel, M. P. Kertzman, J. Klarmann and E. C. Stone (1987) Release of nuclei from relativistic nucleus-nucleus interactions. *20th International Cosmic Ray Conference*, **2**, 152.
- J. F. Ormes, M. H. Israel, R. A. Mewaldt and M. E. Wiedenbeck (1987) A particle astrophysics magnet spectrometer facility for Space Station. *20th International Cosmic Ray Conf.*, **2**, 378.

- J. Klarmann, C. J. Waddington, W. R. Binns, T. L. Garrard, S. P. Gibner and M. H. Israel (1987) Response of ionization chambers and Cherenkov counters to relativistic ultraheavy nuclei. *20th International Cosmic Ray Conference*, **2**, 390.
- P. L. Hink, M. H. Israel, J. Klarmann, J. J. Connell, W. R. Binns and J. W. Epstein (1987) A scintillating optical fiber trajectory (SOFT) detector. *20th Intl. Cosmic Ray Conf.*, **2**, 391.
- A.J. Davis, J.W. Epstein, P.L. Hink, M.H. Israel, J. Klarmann, J.J. Connell & W.R. Binns (1987) Efficiency and attenuation in scintillating optical fibers. *20th International Cosmic Ray Conference*, **2**, 394.
- J. J. Connell, J. W. Epstein, M. H. Israel, J. Klarmann and W. R. Binns (1987) A scintillating optical fiber isotope experiment: Bevalac calibration. *20th Intl. Cosmic Ray Conf.*, **2**, 398.
- W. R. Binns, M. H. Israel, J. Klarmann, T. L. Garrard, E. C. Stone, and C. J. Waddington (1987) Measurements of ultraheavy cosmic rays with HEAO-3. *Essays in Space Science, NASA Conference Publication 2464*, 173.
- V. Vylet, C. J. Waddington, W. R. Binns, T. L. Garrard, M. H. Israel, J. Klarmann, M. Metzger (1990) Energy spectra between 10 and several hundred GeV/nucleon for elements from  $^{18}\text{Ar}$  to  $^{25}\text{V}$ : Results from HEAO-3. *21st International Cosmic Ray Conf.*, **3**, 19 (Adelaide).
- T.L. Garrard, M.H. Israel, J. Klarmann, E.C. Stone, C.J. Waddington, W.R. Binns (1990) Cosmic ray elemental abundances for  $26 \leq Z \leq 40$  measured on HEAO-3. *21st International Cosmic Ray Conference.*, **3**, 61.
- J. R. Cummings, T. L. Garrard, M. H. Israel, J. Klarmann, E. C. Stone, C. J. Waddington, W. R. Binns (1990) Global representation of the cross sections for the production of fragments of UH nuclei. *21st International Cosmic Ray Conference.*, **3**, 416.
- P. L. Hink, M. H. Israel, J. Klarmann, V. Vylet, M. S. Westphall, W. R. Binns, A. J. Davis, J. W. Epstein (1990) Laboratory measurements of the properties of scintillating optical fibers. *21st International Cosmic Ray Conference.*, **4**, 389.
- J. Klarmann, V. Vylet, C. J. Waddington, W. R. Binns, T. L. Garrard, M. H. Israel (1990) Response of ionization chambers and Cherenkov counters to relativistic ultraheavy nuclei. *21st International Cosmic Ray Conference.*, **4**, 434.
- W. R. Binns, J. Klarmann, M. H. Israel, T. L. Garrard, R. A. Mewaldt, E. C. Stone, J. F. Ormes, R. E. Streitmatter, I. L. Rasmussen, and M. E. Wiedenbeck (1990) Large Isotope Spectrometer for Astromag. *Particle Astrophysics -- The NASA Cosmic Ray Program for the 1990s and Beyond*, eds. W. V. Jones, F. J. Kerr, J. F. Ormes, *AIP Conf. Proc.* **203**, 83-88.
- M. E. Wiedenbeck, L. M. Barbier, W. R. Binns, E. R. Christian, B. L. Dougherty, T. L. Garrard, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, J. W. Mitchell, S. H. Sposato, R. E. Streitmatter, C. J. Waddington (1997) The Response of Particle Detectors to Gold Nuclei at 11 GeV/nucleon. *25th International Cosmic Ray Conference*, **3**, 365-368.
- S. H. Sposato, L. M. Barbier, W. R. Binns, E. R. Christian, G. A. de Nolfo, P. F. Dowkontt, J. W. Epstein, P. L. Hink, M. H. Israel, J. Klarmann, D. J. Lawrence, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, R. E. Streitmatter, C. J. Waddington (1999) The Use of Optical Fibers in the Trans-Iron Galactic Element Recorder (TIGER) *SciFi97: Workshop on Scintillating Fiber Detectors, AIP Conference Proceedings*, **450**, 527-531.
- W. R. Binns, P. L. Hink, M. H. Israel, S. H. Sposato, R. A. Mewaldt, T. L. Garrard, R. A. Leske, S. M. Schindler, M. E. Wiedenbeck, R. E. Streitmatter, L. M. Barbier, E. R. Christian, J. W. Mitchell, J. F.

- Ormes, C. J. Waddington (1997) An Experiment to Measure the Elemental Abundances of Ultra-Heavy Cosmic Rays. *25th International Cosmic Ray Conference*, **5**, 65-68.
- S. H. Sposato, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, P. L. Hink, M. H. Israel, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, R. E. Streitmatter, C. J. Waddington (1999) The Trans-Iron Galactic Element Recorder (TIGER): A Balloon-borne Cosmic-Ray Experiment. *26th International Cosmic Ray Conference*, **4**, 29-32.
- J. T. Link, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, P. Dowkontt, J. Epstein, P. L. Hink, M. H. Israel, R. A. Mewaldt, J. W. Mitchell, M. A. Olevitch, S. M. Schindler, S. H. Sposato, R. E. Streitmatter, C. J. Waddington (1999) The Trans-Iron Galactic Element Recorder for the Ultra-Long Duration Balloon Project Demo 2000. *26th International Cosmic Ray Conference*, **4**, 57-60.
- R. M. Kippen, K. Arisaka, M. Atac, W. R. Binns, J. H. Buckley, M. L. Cherry, M. J. Christl, D. Cline, P. Dowkontt, J. W. Epstein, G. J. Fishman, T. G. Guzik, P. L. Hink, M. H. Israel, S. C. Kappadath, G. R. Karr, J. Macri, R. S. Mallozzi, M. L. McConnell, Y. Pischalnikov, W. S. Paciesas, T. A. Parnell, G. N. Pendleton, S. Phengchamnan, G. A. Richardson, K. Rielage, J. M. Ryan, J. G. Stacy, T. O. Tümer, D. B. Wallace, R. B. Wilson (1999) Simulated Performance of the FiberGLAST Gamma-Ray Telescope Concept. *26th International Cosmic Ray Conference*, **4**, 148-151.
- K. Rielage, K. Arisaka, M. Atac, W. R. Binns, J. H. Buckley, M. L. Cherry, M. J. Christl, D. Cline, P. Dowkontt, J. W. Epstein, G. J. Fishman, T. G. Guzik, P. L. Hink, M. H. Israel, S. C. Kappadath, G. R. Karr, R. M. Kippen, J. Macri, R. S. Mallozzi, M. L. McConnell, Y. Pischalnikov, W. S. Paciesas, T. A. Parnell, G. N. Pendleton, S. Phengchamnan, G. A. Richardson, J. M. Ryan, J. G. Stacy, T. O. Tümer, D. B. Wallace, R. B. Wilson (1999) The FiberGLAST Detector: A fiber instrument concept for NASA's Gamma-ray Large Area Space Telescope. *26th International Cosmic Ray Conference*, **4**, 152-155.
- J. R. Cummings, J. H. Adams, L. M. Barbier, W. R. Binns, E. R. Christian, G. A. de Nolfo, P. L. Hink, M. H. Israel, R. A. Leske, J. T. Link, R. A. Mewaldt, J. W. Mitchell, W. Menn, S. M. Schindler, M. Simon, R. E. Streitmatter, C. J. Waddington, M. E. Wiedenbeck (1999) The Charge (Z) Identification Module (ZIM) for ACCESS: An Instrument Calibration using 10.6 GeV/nucleon  $^{79}\text{Au}$ . (1999) *26th International Cosmic Ray Conference*, **4**, 156-159.
- T. A. Parnell, J. H. Adams, W. R. Binns, J. J. Christl, J. H. Derrickson, W. F. Fountain, L. W. Howell, J. C. Gregory, P. L. Hink, M. H. Israel, R. M. Kippen, J. Lee, G. N. Pendleton, Y. Takahashi, J. W. Watts (1999) The Imaging Calorimeter for ACCESS (ICA) *26th International Cosmic Ray Conference*, **4**, 171-174.
- J. W. Watts, J. Lee, L. W. Howell, J. J. Christl, J. H. Derrickson, W. F. Fountain, P. L. Hink, W. R. Binns, M. H. Israel, T. A. Parnell, J. C. Gregory, G. N. Pendleton, R. M. Kippen, Y. Takahashi, J. H. Adams, (1999) The Imaging Calorimeter for ACCESS (ICA) *26th International Cosmic Ray Conference*, **4**, 457-460.
- M. H. Israel, R. E. Streitmatter, S. P. Swordy (1999) Advanced Cosmic-Ray Composition Experiment for the Space Station (ACCESS) *Space Technology and Applications International Forum-1999, AIP Conference Proceedings* **458**, 114-117.
- G. A. de Nolfo, N. E. Yanasak, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, and M. E. Wiedenbeck (2001) Measurements of the Isotopes of Lithium, Beryllium, and Boron from ACE/CRIS *27th International Cosmic Ray Conference*, **5**, 1667-1670.
- S. M. Niebur, W. R. Binns, E. R. Christian, A. C. Cummings, G. A. de Nolfo, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, N.

- E. Yanasak (2001) CRIS Measurements of Electron-Capture-Decay Isotopes:  $^{37}\text{Ar}$ ,  $^{44}\text{Ti}$ ,  $^{49}\text{V}$ ,  $^{51}\text{Cr}$ ,  $^{55}\text{Fe}$ , and  $^{57}\text{Co}$  *27th International Cosmic Ray Conference*, **5**, 1675-1678.
- M. E. Wiedenbeck, J. S. George, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, M. H. Israel, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, N. E. Yanasak (2001) *27th International Cosmic Ray Conference*, **5**, 1679-1682.
- N. E. Yanasak, G. A. de Nolfo, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck (2001) The Cosmic-Ray Contribution to LiBeB: Interpretation of LiBeB Abundances from CRIS ) *27th International Cosmic Ray Conference*, **5**, 1831-1834.
- J. T. Link, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, P. Dowkontt, J. W. Epstein, P. L. Hink, M. H. Israel, R. A. Mewaldt, J. W. Mitchell, M. A. Olevitch, S. M. Schindler, E. C. Stone, R. E. Streitmatter, C. J. Waddington (2001) Measuring the Abundances of Ultra-Heavy Galactic Cosmic Rays through Ultra Long Duration Ballooning *27th International Cosmic Ray Conference*, **6**, 2143-2146.
- W. R. Binns, J. H. Adams, L. M. Barbier, E. R. Christian, N. Craig, A. C. Cummings, J. R. Cummings, T. Doke, N. Hasebe, T. Hayashi, M. H. Israel, D. Lee, R. A. Leske, D. Mark, R. A. Mewaldt, J. W. Mitchell, K. Ogura, S. M. Schindler, E. C. Stone, G. Tarlé, H. Tawara, C. J. Waddington, A. J. Westphal, M. E. Wiedenbeck, N. Yasuda (2001) The Heavy Nuclei eXplorer (HNX) Mission *27th International Cosmic Ray Conference*, **6**, 2181-2184.
- M. H. Israel, J. H. Adams, L. M. Barbier, W. R. Binns, E. R. Christian, N. Craig, A. C. Cummings, J. R. Cummings, T. Doke, N. Hasebe, T. Hayashi, D. Lee, R. A. Leske, D. Mark, R. A. Mewaldt, J. W. Mitchell, K. Ogura, S. M. Schindler, E. C. Stone, G. Tarlé, H. Tawara, C. J. Waddington, A. J. Westphal, M. E. Wiedenbeck, N. Yasuda (2001) The Energetic Trans-Iron Composition Experiment (ENTICE) on the Heavy Nuclei eXplorer (HNX) Mission *27th International Cosmic Ray Conference*, **6**, 2231-2234.
- A. J. Westphal, B. A. Weaver, N. Craig, J. H. Adams, L. M. Barbier, E. R. Christian, W. Mitchell, G. Sneiderman, W. R. Binns, M. H. Israel, J. R. Cummings, A. C. Cummings, R. A. Leske, R. A. Mewaldt, S. M. Schindler, E. C. Stone, M. E. Wiedenbeck, T. Doke, N. Hasebe, T. Hayashi, K. Ogura, G. Tarlé, A. Tomaasch, M. Schubnell, H. Tawara, C. J. Waddington, N. Yasuda (2001) ECCO: Th/U/Pu/Cm Dating of Galactic Cosmic Ray Nuclei *27th International Cosmic Ray Conference*, **6**, 2235-2238.
- K. Rielage, M. Christl, J. Adams, W. R. Binns, W. Fountain, P. Hink, L. Howell, M. Israel, R. M. Kippen, J. Lee, T. Parnell, J. Watts (2001) An Engineering prototype of the Imaging Calorimeter for ACCESS (ICA) *27th International Cosmic Ray Conference*, **6**, 2239-2242.
- T. A. Parnell, J. H. Adams, W. R. Binns, M. J. Christl, J. H. Derrickson, W. F. Fountain, L. W. Howell, J. C. Gregory, P. L. Hink, M. H. Israel, R. M. Kippen, G. N. Pendleton, Y. Takahashi, J. W. Watts (2001) An Imaging Calorimeter for ACCESS Concept Study *27th International Cosmic Ray Conference*, **6**, 2243-2246.
- M. J. Christl, J. H. Adams, W. R. Binns, J. H. Derrickson, W. F. Fountain, L. W. Howell, J. C. Gregory, P. L. Hink, M. H. Israel, R. M. Kippen, J. Lee, T. A. Parnell, G. N. Pendleton, Y. Takahashi, J. W. Watts (2001) Accelerator Test of an Imaging Calorimeter *27th International Cosmic Ray Conference*, **6**, 2293-2296.
- A. W. Labrador, N. E. Yanasak, W. R. Binns, A. C. Cummings, G. A. de Nolfo, J. S. George, M. H. Israel, R. A. Leske, R. A. Mewaldt, M. Lijowski, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck (2003) Extended Energy Spectrum Measurements of Elements with the Cosmic Ray Isotope Spectrometer (CRIS) *28th International Cosmic Ray Conference*, **4**, 1773-1776.

- G. A. de Nolfo, N. E. Yanasak, W. R. Binns, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, M. Lijowski, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck (2003) New Measurements of the Li, Be, and B Isotopes as a Test of Cosmic Ray Transport Models *28th International Cosmic Ray Conference*, **4**, 1777-1780.
- J. T. Link, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, S. Geier, M. H. Israel, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, L. M. Scott, E. C. Stone, R. E. Streitmatter, C. J. Waddington (2003) Measurements of the Ultra-Heavy Galactic Cosmic-Ray Abundances between  $Z=30$  and  $Z=40$  with the TIGER Instrument *28th International Cosmic Ray Conference*, **4**, 1781-1784.
- M. E. Wiedenbeck W. R. Binns, A. C. Cummings, A. J. Davis, G. A. de Nolfo, J. S. George, M. H. Israel, A. W. Labrador, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, (2003) Refractory Nuclides in the Cosmic-Ray Source *28th International Cosmic Ray Conference*, **4**, 1899-1902.
- S. Geier, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, M. H. Israel, J. T. Link, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, L. M. Scott, E. C. Stone, R. E. Streitmatter, C. J. Waddington (2003) Possible Detection of Large Solar Particle Event at Balloon Altitudes during the 2001-2002 TIGER Flight *28th International Cosmic Ray Conference*, **6**, 3261-3264.
- L. M. Scott, A. J. Davis, M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, R. A. Leske, R. A. Mewaldt, S. M. Niebur, E. C. Stone, T. T. von Roseninge, and N. E. Yanasak (2003) Direct Evidence of Energy-Loss in Electron-Capture-Decay Secondary Isotopes in the Heliosphere *28th International Cosmic Ray Conference*, **7**, 3811-3814.
- R. A. Mewaldt, A. J. Davis, W. R. Binns, G. A. de Nolfo, J. S. George, M. H. Israel, R. A. Leske, E. C. Stone, M. E. Wiedenbeck, and T. T. Roseninge (2005), The Cosmic Ray Radiation Dose in Interplanetary Space-Present Day and Worst-Case Evaluations, *29th International Cosmic Ray Conference*, **2**, 433-436.
- M. E. Wiedenbeck, A. J. Davis, R. A. Leske, W. R. Binns, C. M. S. Cohen, A. C. Cummings, G. de Nolfo, M. H. Israel, A. W. Labrador, R. A. Mewaldt, L. M. Scott, T. T. von Roseninge (2005), The Level of Solar Modulation of Galactic Cosmic Rays from 1997 to 2005 as Derived from ACE Measurements of Elemental Energy Spectra, *29th International Cosmic Ray Conference*, **2**, 277-280.
- S. Geier, B F. Rauch, L. M. Barbier, W. R. Binns, J. R. Cummings, G. A. de Nolfo, M. H. Israel, J. T. Link, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, L. M. Scott, E. C. Stone, R. E. Streitmatter, and C. J. Waddington (2005) Observations of the Ultra-Heavy Galactic Cosmic Ray Abundances with TIGER, *29th International Cosmic Ray Conference*, **3**, 93-96.
- G. A. de Nolfo, L. M. Barbier, W. R. Binns, J. R. Cummings, S. Geier, M. H. Israel, J. T. Link, R. A. Mewaldt, J. W. Mitchell, B. F. Rauch, S. M. Schindler, L. M. Scott, E.C. Stone, R. E. Streitmatter, C. J. Waddington, M. E. Wiedenbeck (2005) Co/Ni Ratio Between 0.8 and 5 GeV/nucleon from TIGER-2001, *29th International Cosmic Ray Conference*, **3**, 61-64.
- W. R. Binns, M. E. Wiedenbeck, M. Arnould, A. C. Cummings, J. S. George, S. Goriely, M. H. Israel, R. A. Leske, R. A. Mewaldt, G. Meynet, L. M. Scott, E. C. Stone, and T. T. von Roseninge (2005) Cosmic Ray Neon, Wolf-Rayet Stars, and the Origin of GCRs, *29th International Cosmic Ray Conference*, **3**, 153-156.
- W. R. Binns, M. H. Israel, K. Rielage, D. H. Kaplan (2006) Scintillating Optical Fibers for Astroparticle Physics, *Astroparticle, Particle and Space Physics, Detectors and Medical Physics Application: Proceedings of the 9<sup>th</sup> Conference, Como, Italy, October 2005*, ed. M. Barone, et al., World Scientific Publishing, 239 – 244.

- G. A. de Nolfo, W.R. Binns, R.A. Mewaldt, I.V. Moskalenko, R. Ogliore, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, N.E. Yanasak, C.M.S. Cohen, A.C. Cummings, A.J. Davis, J.S. George, P.L. Hink, M.H. Israel, K. Lave, R.A. Leske, "Cosmic Ray Helium Intensities over the Solar Cycle from ACE", *30<sup>th</sup> Intl. Cosmic Ray Conference* (Merida, Mexico), **1** (2007) 813
- W.R. Binns, A.C. Cummings, G.A. DeNolfo, M.H. Israel, R.A. Leske, R.A. Mewaldt, T.T. von Roseninge, E.C. Stone (2007) Can  $^{59}\text{Ni}$  Synthesized in OB Associations Decay to  $^{59}\text{Co}$  Before Being Accelerated to Cosmic-ray Energies? *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 27-30.
- K. J. Palladino, S.W. Barwick, M.A. DuVernois, R.C. Field, D.J. Goldstein, P.W. Gorham, A. Goodhue, C. Hast, C.L. Hebert, S. Hoover, M.H. Israel, J. Kowalski, J.B. Beatty, J.G. Learned, K.M. Liewer, J.T. Link, E. Luszczek, S. Matsuno, B. Mercurio, C. Miki, P. Miocinovic, J. Nam, C.J. Naudet, D.Z. Besson, J. Ng, R. Nichol, K. Reil, A. Romero-Wolfe, M. Rosen, D. Saltzberg, D. Seckel, G.S. Varner, D. Walz, F. Wu, W.R. Binns, C. Chen, P. Chen, J.M. Clem, A. Connolly, P.W. Dowkontt, ANITA:First Flight Overview and Detector Performance, (2007) *30th International Cosmic Ray Conference*, (Merida, Mexico) **5**, 1441-1444.
- B. F. Rauch, M. H. Israel, L. M. Barbier, W. R. Binns, E. R. Christian, J. R. Cummings, G. A. de Nolfo, S. Geier, J. T. Link, R. A. Mewaldt, J. W. Mitchell, S. M. Schindler, L. M. Scott, E. C. Stone, R. E. Streitmatter, C. J. Waddington, (2007) Measurement of the Relative Abundances of the Ultra-Heavy Galactic Cosmic Rays ( $30 \leq Z \leq 40$ ) with TIGER, *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 7-10.
- G. A. de Nolfo, L.M. Barbier, B.F. Rauch, S.M. Schindler, L.M. Scott, E.C. Stone, R.E. Streitmatter, C.J. Waddington, W.R. Binns, E.R. Christian, J.R. Cummings, S. Geier, M.H. Israel, J.T. Link, R.A. Mewaldt, J.W. Mitchell, (2007) Co/Ni Ratio Between  $\sim 0.8$ -5.0 GeV/nucleon from the TIGER 2001 Flight, *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 43-46.
- M. E. Wiedenbeck, W. R. Binns, A. C. Cummings, G. A. de Nolfo, M. H. Israel, R. A. Leske, R. A. Mewaldt, R. C. Ogliore, E. C. Stone, T. T. von Roseninge, (2007) Primary and Secondary Contributions to Arriving Abundances of Cosmic Ray Nuclides, *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 149-152.
- R.C. Ogliore, E.C. Stone, R.A. Mewaldt, L.M. Scott, T. T. von Roseninge, M.E. Wiedenbeck, W.R. Binns, A.C. Cummings, G.A. de Nolfo, S. Goriely, M.H. Israel, R.A. Leske, I.V. Moskalenko, (2007) The Sulfur, Argon, and Calcium Isotopic Composition of the Galactic Cosmic Ray Source, *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 125-128.
- T. Gregory Guzik, J. H. Adams, Jr., G. L. Bashindzhagyan, M. I. Panasyuk, A. Panov, N. V. Sokolskaya, J. Watts, J. P. Wefel, V. Zatsepin, W. R. Binns, J. Chang, M. L. Cherry, M. Christl, J. Isbert, M. H. Israel, N. Korotkova, (2007) The Electron Calorimeter (ECAL) Long Duration Balloon Experiment, *30th International Cosmic Ray Conference*, (Merida, Mexico) **2**, 405-408.
- G.A. de Nolfo, W.R. Binns, C.M.S. Cohen, R.A. Mewaldt, I.V. Moskalenko, R. Ogliore, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, N.E. Yanasak, A.C. Cummings, A.J. Davis, J.S. George, P.L. Hink, M.H. Israel, K. Lave, R.A. Leske, (2007) Cosmic Ray Helium Intensities over the Solar Cycle from ACE, *30th International Cosmic Ray Conference*, (Merida, Mexico) **1**, 813-816.
- G.A. deNolfo, W.R. Binns, M.H. Israel, E.R. Christian, J.W. Mitchell, T. Hams, J.T. Link, M. Sasaki, A.W. Labrador, R.A. Mewaldt, E.C. Stone, C.J. Waddington, M.E. Wiedenbeck, (2009) Identifying Galactic Cosmic Ray Origins with Super-TIGER, *31st International Cosmic Ray Conference*, (Lodz, Poland)
- J.T. Link, L.M. Barbier, W.R. Binns, E.R. Christian, J.R. Cummings, S. Geier, M.H. Israel, K. Ladders, R.A. Mewaldt, J.W. Mitchell, G.A. deNolfo, B.F. Rauch, S.M. Schindler, L.M. Scott, R.E.

- Streitmatter, E.C. Stone, C.J. Waddington & M.E. Wiedenbeck (2009) Insights into the galactic cosmic-ray source from the TIGER experiment, *31st International Cosmic Ray Conference*, (Lodz, Poland)
- W.R. Binns, A.C. Cummings, M.H. Israel, R.A. Leske, R.A. Mewaldt, G.A. deNolfo, T.T. von Roseninge, E.C. Stone & M.E. Wiedenbeck (2009) Abundance measurements of Zn, Ga., Ge, & Se from the Cosmic Ray Isotope Spectrometer (CRIS) experiment on the Advanced Composition Explorer (ACE) satellite, *31st International Cosmic Ray Conference*, (Lodz, Poland)
- W.R. Binns, J.H. Adams, A.F. Barghouty, E.R. Christian, A.C. Cummings, T. Hams, M.H. Israel, A.W. Labrador, R.A. Leske, J.T. Link, R.A. Mewaldt, J.W. Mitchell, G.A. deNolfo, M. Sasaki, E.C. Stone, C.J. Waddington, M.E. Wiedenbeck, (2009) The Energetic Trans-Iron Cosmic-ray Experiment (ENTICE), *31st International Cosmic Ray Conference*, (Lodz, Poland)
- M. Christl for OASIS Team (2009) The Orbiting Astrophysical Spectrometer in Space (OASIS), *31st International Cosmic Ray Conference*, (Lodz, Poland)
- J. Nam for ANITA Collaboration (2009) Possible Impulsive Radio Signals from Ultra-high Energy Extensive Air Showers Detected by the ANITA Experiment, *31st International Cosmic Ray Conference*, (Lodz, Poland)
- A. Romero-Wolf for the ANITA Collaboration (2009) New Limits on the Ultra-high Energy Cosmic Neutrino Flux from the ANITA Experiment and Current Developments, *31st International Cosmic Ray Conference*, (Lodz, Poland)
- K.A. Lave, W.R. Binns, A.C. Cummings, G.A. de Nolfo, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck (2009) A Comparison of ACE Measurements of Galactic Cosmic-Ray Abundances and Energy Spectra for Two Successive Solar Minima. *31st International Cosmic Ray Conference*, (Lodz, Poland)
- M.E. Wiedenbeck, A.J. Davis, C.M.S. Cohen, A.C. Cummings, A.W. Labrador, R.A. Leske, R.A. Mewaldt, E.C. Stone, W.R. Binns, M.H. Israel, K.A.Lave, E.R. Christian, G.A. de Nolfo, T.T. von Roseninge, (2009) Time Dependence of Solar Modulation throughout Solar Cycle 23 as Inferred from ACE Measurements of Cosmic-Ray Energy Spectra *31st International Cosmic Ray Conference*, (Lodz, Poland)
- James Adams, Abdunnasser Barghouty, Walter Binns, Mark Christl, Charles Cosse, T. Gregory Guzik, Gerogia De Nolfo, Thomas Hams, Joachim Isbert, Martin Israel, John Krizmanic, Allan Labrador, Jason Link, R. A. Mewaldt, John Mitchell, Alexander Moiseev, Makoto Sasaki, Steve Stochaj, Edward Stone, Robert Streitmatter, Jake Waddington, John Watts, John P. Wefel, and Mark Wiedenbeck, (2010) The OASIS Mission, *38<sup>th</sup> COSPAR Assembly* (Bremen, Germany), Paper E18-0008-10
- Walter Binns, Eric Christian, A.C. Cummings, Georgia De Nolfo, Martin Israel, Richard Leske, R.A. Mewaldt, Tycho von Roseninge, E.C. Stone, Mark Wiedenbeck, (2010), First Measurements of the Isotopic Composition of the Ultra-Heavy Galactic Cosmic Ray Nuclei Cu, An, Ga, and Ge from the CRIS Experiment on the ACE Satellite, *38<sup>th</sup> COSPAR Assembly* (Bremen, Germany), Paper E18-0009-10
- Walter Binns, E.R. Christian, A.C. Cummings, G.A. de Nolfo, D.P. Flanagan, S. Geier, M.H. Israel, R.A. Leske, J.T. Link, K. Ladders, R.A. Mewaldt, J.W. Mitchell, B.F. Rauch, T.T. von Roseninge, L.M. Scott, E.C. Stone, C.J. Waddington, M.E. Wiedenbeck (2010), Elemental Abundance Measurements and the Origin of Galactic Cosmic Rays, *38<sup>th</sup> COSPAR Assembly* (Bremen, Germany), Paper E18-0005-10

- Walter Binns for the ANITA team, (2010) The Anita Experiment: New High-Energy Neutrino Limits and Detection of Ultra-High Energy Cosmic Rays, *38<sup>th</sup> COSPAR Assembly* (Bremen, Germany), Paper PSB1-0052-10
- R.A. Mewaldt, A. Davis, K. Lave, R. Leske, M.E. Wiedenbeck, W.R. Binns, A.C. Cummings, M.H. Israel, E.C. Stone, T.T. von Roseninge, (2010) Record intensities of Galactic Cosmic Rays in 2009, *38<sup>th</sup> COSPAR Assembly* (Bremen, Germany), Paper D12-0038-10
- J.T. Link, W.R. Binns, R.G. Bose, D.L. Braun, E.R. Christian, W.M. Daniels, G.A. DeNolfo, P.F. Dowkontt, D.J. Hahne, T. Hams, M.H. Israel, A.W. Labrador, R.A. Mewaldt, J.W. Mitchell, P.R. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, F. San Sebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, J.E. Ward, M.E. Wiedenbeck, (2011) Scintillation Detector for the Measurement of Ultra-Heavy Cosmic Rays on the Super-TIGER Experiment, *32<sup>nd</sup> International Cosmic Ray Conference* (Beijing, China), paper 0453
- W.R. Binns, E.R. Christian, A.C. Cummings, G.A. De Nolfo, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, (2011) First Measurements of the Isotopic Composition of the Ultra-heavy Galactic Cosmic Ray Nuclei  $^{31}\text{Ga}$  and  $^{32}\text{Ge}$  from the CRIS Experiment on ACE, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0649
- M.H. Israel, W.R. Binns, E.R. Christian, A.C. Cummings, G.A. de Nolfo, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, (2011) Measurements of the elemental abundances of ultra-heavy galactic cosmic rays from Cu through Sr from the CRIS experiment on the ACE satellite, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0655
- B.F. Rauch, W.R. Binns, M.H. Israel, P.S. Marrocchesi, Y. Shimizu, S. Torii, (2011) Capability of the CALET Experiment for Measuring Elemental Abundances of Galactic Cosmic Ray Nuclei Heavier than Nickel ( $Z=28$ ), *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0690
- J.E. Ward, W.R. Binns, R.G. Bose, D.L. Braun, E.R. Christian, W.M. Daniels, G.A. De Nolfo, P.F. Dowkontt, D.J. Hahne, T. Hams, M.H. Israel, A.W. Labrador, J.T. Link, R.A. Mewaldt, J.W. Mitchell, P.R. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, F. San Sebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, M.E. Wiedenbeck, The Super-TIGER Scintillating Fiber Hodoscope, (2011) *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0714
- J.T. Link, W.R. Binns, R.G. Bose, D.L. Braun, E.R. Christian, W.M. Daniels, G.A. De Nolfo, P.F. Dowkontt, D.J. Hahne, T. Hams, M.H. Israel, A.W. Labrador, R.A. Mewaldt, J.W. Mitchell, P.R. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, F. San Sebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, J.E. Ward, M.E. Wiedenbeck, (2011) Scintillation Detector for the Measurement of Ultra-Heavy Cosmic Rays on the Super-TIGER Experiment, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0737
- Kenji Yoshida for the CALET Collaboration, (2011) The science objectives for CALET, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0766
- Shoji Torii for the CALET Collaboration, (2011) Overview of the CALET Mission to the ISS, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0615
- B.F. Rauch, W.R. Binns, M.H. Israel, P.S. Marrocchesi, Y. Shimizu, S. Torii, (2011) Capability of the CALET Experiment for Measuring Elemental Abundances of Galactic Cosmic Ray Nuclei Heavier than Nickel ( $Z=28$ ), *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0690
- T. Hams, W.R. Binns, R.G. Bose, D.L. Braun, E.R. Christian, W.M. Daniels, G.A. De Nolfo, P.F. Dowkontt, D.J. Hahne, T. Hams, M.H. Israel, A.W. Labrador, R.A. Mewaldt, J.W. Mitchell, P.R. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, F. San Sebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, J.E. Ward, M.E. Wiedenbeck, (2011) Cherenkov Counter Development for



the Super-TIGER Balloon Payload, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0831

W. Labrador, R.A. Mewaldt, W.R. Binns, A.C. Cummings, G.A. de Nolfo, M.H. Israel, R.A. Leske, E.C. Stone, T.T. von Rosenvinge, M.E. Wiedenbeck, (2011) Extending the Iron Energy Spectrum Measurements of the Cosmic Ray Isotope Spectrometer throughout 1997-2011, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 0791

J.W. Mitchell, W.R. Binns, R.G. Bose, D.L. Braun, E.R. Christian, W.M. Daniels, G.A. De Nolfo, P.F. Dowkontt, D.J. Hahne, T. Hams, M.H. Israel, A.W. Labrador, R.A. Mewaldt, P.R. Moore, R.P. Murphy, M.A. Olevitch, B.F. Rauch, F. San Sebastian, M. Sasaki, G.E. Simburger, E.C. Stone, C.J. Waddington, J.E. Ward, M.E. Wiedenbeck, (2011) The Super-TIGER Instrument to Probe Galactic Cosmic Ray Origins, *32<sup>nd</sup> International Cosmic Ray Conference (Beijing, China)*, paper 01234

Co-author of several papers (2013) *33<sup>rd</sup> International Cosmic Ray Conference (Rio de Janeiro, Brazil)* details to be added.