

**PUBLICATIONS**  
**ARTHUR B. McDONALD**

**Recent Presentations and Invited Talks**

**Colloquia (past 16 years) at:**

St. Mary's University, St. F. X. University, Lisbon, UBC, Boston U., Caltech, U. Alberta, Edmonton, U. Hawaii, Laurentian, Oxford, Uppsala, Berkeley, Carleton, Deep River, U. Wisconsin, Madison, York, Dresden, Alberta, Sussex, Oxford, Leeds, ICTP Trieste, Notre Dame, McGill, Acadia University, University of British Columbia, University of Hawaii, LIP Lisbon, University of Valencia, University of Chicago, Dalhousie University, Uppsala University, Michigan State University, Kansas State University, Oak Ridge National Laboratory, University of Montreal, University of Guelph, Perimeter Institute (Waterloo, Ontario), Joint Institute for Nuclear Research (Dubna, Russia), University of Milan, University of Heidelberg, University of Regina, Oxford University, Princeton University, Harvard University, Queen's University, Dalhousie University, California Institute of Technology, St. Mary's University, Columbia University, University of Waterloo, University of Indiana, McGill University, University of Alberta, CERN Laboratory in Geneva, University of Rochester, University of Toronto, Massachusetts Institute of Technology, Bartol Research Institute at University of Delaware, University of California at San Diego, Royal Military College, Case Western Reserve University, Brookhaven National Laboratory, University of Adelaide.

**Invited speaker (past 16 years) at:**

Public Lecture, Kingston, 2016; Smith Fest, Princeton, 2016; FISICA 2016, Braga, Portugal; Neutrino 2016, London; Canada House, London, 2016; Lindau Conference, Germany, 2016; Chengdu, China, 2016; IDEACITY, Toronto, 2016; CAP, Ottawa, 2016; CASCA, Winnipeg, 2016, APS, Salt Lake City, 2016; CIFAR Cosmology & Gravity, Whistler, BC, 2016; Canada 150, Halifax, 2016; NDTV, New Delhi, 2016; India Science Congress, Mysore, 2016; Science Policy Conference, Ottawa, 2015, 2016; Nobel Lecture, Stockholm, 2015; NuAtmospheres, London, 2015; Wright Lecture, Geneva, 2014; Paris, 2014, TRISEP, SNOLAB, 2014; Pontecorvo 100 Conference, Pisa, Italy, 2013, Director's Colloquium, Los Alamos National Lab, 2013, Carolina International Symposium on Neutrino Physics, 2013, Symposium on Perspectives on Neutrino Physics and Fundamental Symmetries, Seattle, 2013, Vernon Hughes Memorial Public Lecture, Yale University, 2012, Perimeter Institute, 2012, Neutrino 2012 Conference, Kyoto Japan, 2012, GWPI Distinguished Lecturer, University of Waterloo, 2011, Neutrino Telescopes, Venice, Italy, 2011; E. Segre Lecture, Berkeley, 2010; Erice Workshop on Neutrino Physics, Erice, Italy, 2009; WIN09, Perugia, Italy, 2009; Royal Society, London, 2009; Neutrino Telescopes, Venice, Italy, 2009; Huggins Science Lecturer, Acadia University, 2008; Vancouver Institute, 2008; Canadian Association of Physicists, Quebec City, 2008; Canadian Embassy, Tokyo, 2008; Institute for the Physics and Mathematics of the Universe, Tokyo, 2008; Erich Vogt Fest, 2008; TRIUMF Laboratory, Vancouver, 2008; Donald R. Hamilton Lecturer, Princeton University, 2008; Astro2007 Conference, Faro, Portugal, 2007; Neutrino Telescopes, Venice, 2007; H.A. Bethe Memorial Symposium, Cornell University, 2006; SNOW2006, Stockholm, Sweden, 2006; Helmut Baer Lecturer, University of Michigan, 2006; D.A. Bromley Memorial Symposium, Yale, 2005; J.N Bahcall Memorial Symposium, IAS, Princeton, 2005; E.W. Guptill Lecturer at Dalhousie University, 2005; Topics in Astroparticle and Underground Physics (TAUP2005), Zaragoza, Spain; Manne Siegbhan Lecturer, Stockholm University, Sweden, 2005; Atlantic Provinces Undergraduate Physics Conference, Halifax, 2005; Nobel Symposium on Neutrino Physics, Stockholm, Sweden, 2004; COSMO04 conference, Toronto, 2004; International Nuclear Physics Conference, Goteborg, Sweden, 2004; Welsh Lecturer at University of Toronto, 2004; Basterfield Lecturer at the University of Regina, 2004; UK-Canada Rutherford Lecture of the Royal Society, 2003; Royal Astronomical Society, London, 2003; Royal Spanish Physical Society, Madrid, 2003; International Astronomical Union (2003), Sydney,

Australia; American Physical Society, Washington, D.C., 2003; Neutrino Telescopes X (2003), Venice, Italy; Paliarno di Neutrini, Accademia dei Lincei (2003), Rome, Italy; Particles and Nuclei International Conference (PANIC2002), Osaka, Japan; Physics in Collision 2002, Stanford, California; ICFA2002 Conference, CERN, Geneva, Switzerland; MRST Conference in Theoretical Physics 2002, Perimeter Institute, Waterloo, Canada; European Physical Society High Energy Physics Conference 2001 in Budapest, Hungary; Conference on Neutrino Oscillations 2001, Venice, Italy; Conference on Theory, Astroparticle and Underground Physics 2001, Gran Sasso, Italy; American Physical Society Division of Nuclear Physics 2001, Hawaii; Neutrino 2000, Sudbury; Canadian Astronomical Society, Kingston; TEDCITY 2000, Toronto; Lake Louise Winter Institute on Particle Physics; Western Regional Nuclear Physics Conference, Banff; American Astronomical Society, Washington, D.C.; Canadian Undergraduate Physics Conferences at Queen's (also Dalhousie and University of Ottawa previously); Deep River Science Academy and the "Kingston 2000" Astropysics Conference at the University of Toronto.

### **List of Publications**

- 1) CURRENT STATUS AND FUTURE PROSPECTS FOR THE SNO+ EXPERIMENT  
S. Andringa et al (SNO+ Collaboration) Advances in High Energy Physics, 2016
- 2) RADON BACKGROUNDS IN THE DEAP-1 LIQUID ARGON-BASED DARK MATTER DETECTOR  
P.-A. Amaudruz, M. Batygov, B. Beltran, K. Boudjemline, M. G. Boulay, B. Cai, T. Caldwell, M. Chen, R. Chouinard, B. T. Cleveland, D. Contreras, K. Dering, F. Duncan, R. Ford, R. Gagnon, F. Giuliani, M. Gold, V. V. Golovko, P. Gorel, K. Graham, D. R. Grant, R. Hakobyan, A. L. Hallin, P. Harvey, C. Hearn, C. J. Jillings, M. Kuźniak, I. Lawson, O. Li, J. Lidgard, P. Liimatainen, W. H. Lippincott, R. Mathew, A. B. McDonald, T. McElroy, K. McFarlane, D. McKinsey, A. Muir, C. Nantais, K. Nicolics, J. Nikkel, T. Noble, E. O'Dwyer, K. S. Olsen, C. Ouellet, P. Pasuthip, T. Pollmann, W. Rau, F. Retiere, M. Ronquest, P. Skensved, T. Sonley, J. Tang, E. Vázquez-Jauregui, L. Veloce, M. Ward, Astroparticle Physics 62, 178-194 (2015)
- 3) IMPROVING PHOTOELECTRON COUNTING AND PARTICLE IDENTIFICATION IN SCINTILLATION DETECTORS WITH BAYSEAN TECHNIQUES  
M. Akashi-Ronquest, P. A. Amaudruz, M. Batygov, B. Beltran, M. Bodmer, M. G. Boulay, B. Broerman, B. Buck, A. Butcher, B. Cai, T. Caldwell, M. Chen, Y. Chen, B. Cleveland, K. Coakley, K. Dering, F. A. Duncan, J. A. Formaggio, R. Gagnon, D. Gastler, F. Giuliani, M. Gold, V. V. Golovko, P. Gorel, K. Graham, E. Grace, N. Guerrero, V. Guiseppe, A. L. Hallin, P. Harvey, C. Hearn, R. Henning, A. Hime, J. Hofgartner, S. Jaditz, C. J. Jillings, C. Kachulis, E. Kearns, J. Kelsey, J. R. Klein, M. Kuzniak, A. LaTorre, I. Lawson, O. Li, J. J. Lidgard, P. Liimatainen, S. Linden, K. McFarlane, D. N. McKinsey, S. MacMullin, A. Mastbaum, R. Mathew, A. B. McDonald, D. M. Mei, J. Monroe, A. Muir, C. Nantais, K. Nicolics, J. A. Nikkel, T. Noble, E. O'Dwyer, K. Olsen, G. D. Orebi Gann, C. Ouellet, K. Palladino, P. Pasuthip, G. Perumpilly, T. Pollmann, P. Rau, F. Retiere, K. Rielage, R. Schnee, S. Seibert, P. Skensved, T. Sonley, E. Vazquez-Jauregui, L. Veloce, J. Walding, B. Wang, J. Wang, M. Ward, C. Zhang, Astroparticle Physics, Vol. 65, 01.05.2015, p. 40–54.
- 4) A SEARCH FOR ASTROPHYSICAL BURST SIGNALS AT THE SUDBURY NEUTRINO OBSERVATORY  
The SNO Collaboration (B. Aharmim et al) Astroparticle Physics 55, 1-7.
- 5) COMBINED ANALYSIS OF ALL THREE PHASES OF SOLAR NEUTRINO DATA FROM THE SUDBURY NEUTRINO OBSERVATORY

The SNO Collaboration (B. Aharmim et al) Phys. Rev. C 88, 025501 (2013)

6) MEASUREMENT OF THE  $\nu_e$  AND TOTAL  $^8\text{B}$  NEUTRINO FLUXES WITH THE SUDBURY NEUTRINO OBSERVATORY PHASE-III DATA SET

B. Aharmim, S. N. Ahmed, J. F. Amsbaugh, J. M. Anaya, A. E. Anthony, J. Banar, N. Barros, E. W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S. D. Biller, K. Boudjemline, M. G. Boulay, T. J. Bowles, M. C. Browne, T. V. Bullard, T. H. Burritt, B. Cai, Y. D. Chan, D. Chauhan, M. Chen, B. T. Cleveland, G. A. Cox, C. A. Currat, X. Dai, H. Deng, J. A. Detwiler, M. DiMarco, P. J. Doe, G. Doucas, M. R. Dragowsky, P.-L. Drouin, C. A. Duba, F. A. Duncan, M. Dunford, E. D. Earle, S. R. Elliott, H. C. Evans, G. T. Ewan, J. Farine, H. Fergani, F. Fleurot, R. J. Ford, J. A. Formaggio, M. M. Fowler, N. Gagnon, J. V. Germani, A. Goldschmidt, J. T. M. Goon, K. Graham, E. Guillian, S. Habib R. L. Hahn, A. L. Hallin, E. D. Hallman, A. A. Hamian, G. C. Harper, P. J. Harvey, R. Hazama, K. M. Heeger, W. J. Heintzelman, J. Heise, R. L. Helmer, R. Henning, A. Hime, C. Howard, M. A. Howe, M. Huang, P. Jagam, B. Jamieson, N. A. Jelley, K. J. Keeter, J. R. Klein, L. L. Kormos, M. Kos, A. Kruger, C. Kraus, C. B. Krauss, T. Kutter, C. C. M. Kyba, R. Lange, J. Law, I. T. Lawson, K. T. Lesko, J. R. Leslie, J. C. Loach, R. MacLellan, S. Majerus, H. B. Mak, J. Maneira, R. Martin, N. McCauley, A. B. McDonald, S. R. McGee, C. Mifflin G. G. Miller, M. L. Miller, B. Monreal, J. Monroe, B. Morissette, A. W. Myers, B. G. Nickel, A. J. Noble, H. M. O'Keefe, N. S. Oblath, R. W. Ollerhead, G. D. Orebi Gann, S. M. Oser, R. A. Ott, S. J. M. Peeters, A. W.P. Poon, G. Prior, S. D. Reitzner, K. Rielage, B. C. Robertson, R. G. H. Robertson, E. Rollin, M. H. Schwendener, J. A. Secrest, S. R. Seibert, O. Simard, J. J. Simpson, P. Skensved, M. W. E. Smith, T. J. Sonley, T. D. Steiger, L. C. Stonehill, G. Tesic P. M. Thornewell, N. Tolich, T. Tsui, C. D. Tunnell, T. Van Wechel, R. Van Berg, B. A. VanDevender, C. J. Virtue, B. L. Wall, D. Waller, H. Wan Chan Tseung, J. Wendland, N. West, J. B. Wilhelmy, J. F. Wilkerson, J. R. Wilson, J. M. Wouters, A. Wright, M. Yeh, F. Zhang, and K. Zuber, Phys.Rev. C87 (2013) 015502

7) LOW MULTIPLICITY BURST SEARCH AT THE SUDBURY NEUTRINO OBSERVATORY

The SNO Collaboration (B. Aharmim et al), Astrophys.J.728:83, 2011.

8) SNO AND THE NEW SNOLAB

A. B. McDonald, Prog. Part. Nucl. Phys. 64:196-198, 2010.

9) THE CALIBRATION OF THE SUDBURY NEUTRINO OBSERVATORY USING UNIFORMLY DISTRIBUTED SOURCES

K. Boudjemline, B. Cai, B.T. Cleveland, H.C. Evans, G.T. Ewan, J. Farine, R.J. Ford, E. Guillian, A.L. Hallin, E.D. Hallman, C. Howard, P. Jagam, N.A. Jelley, K.J. Keeter, J.R. Klein, C. Kraus, C.B. Krauss, R. Lange, I.T. Lawson, J.C. Loach, A.B. McDonald, G. McGregor, A.J. Noble, H.M. O'Keefe, S.J.M. Peeters, A.W.P. Poon, S.D. Reitzner, K. Rielage, R.G.H. Robertson, V.L. Rusu, S.R. Seibert, P. Skensved, M.J. Thomson. Nucl. Instrum. Meth. A620:171-181, 2010.

10) LOW ENERGY THRESHOLD ANALYSIS OF THE PHASE I AND PHASE II DATA SETS OF THE SUDBURY NEUTRINO OBSERVATORY

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline, M.G. Boulay, T.H. Burritt, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J. Detwiler, M. DiMarco, P.J. Doe, G. Doucas, P.-L. Drouin, C. A. Duba, F.A. Duncan, M. Dunford, E. D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J.T.M. Goon, E.

Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M.A. Howe, M. Huang, B. Jamieson, N.A. Jelley, K. J. Keeter, J.R. Klein, L. L. Kormos, M. Kos, C. Kraus, C.B. Krauss, T. Kutter, C.C.M. Kyba, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S. McGee, M.L. Miller, B. Monreal, J. Monroe, B. Morrissette, B. G. Nickel, A.J. Noble, H. M. O'Keeffe, N.S. Oblath, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, J.A. Secrest, S.R. Seibert, O. Simard, D. Sinclair, P. Skensved, M.W.E. Smith, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, C. D. Tunnell, R. Van Berg, B.A. VanDevender, C.J. Virtue, B. L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang and K. Zuber, Phys.Rev.C81:055504, 2010

#### 11) THE SUDBURY NEUTRINO OBSERVATORY

N. Jelley, A. B. McDonald, R.G.H. Robertson, Ann.Rev.Nucl.Part.Sci.59:431-465, 2009.

#### 12) MEASUREMENT OF THE COSMIC RAY AND NEUTRINO-INDUCED MUON FLUX AT THE SUDBURY NEUTRINO OBSERVATORY

B. Aharmim, S.N. Ahmed, T.C. Andersen, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline, M.G. Boulay, T.H. Burritt, B. Cai, Y.D. Chan, M. Chen, M.C. Chon, B.T. Cleveland, G.A. Cox-Mobrand, C.A. Currat, X. Dai, F. Dalnoki-Veress, H. Deng, J. Detwiler, P.J. Doe, R.S. Dosanjh, G. Doucas, P.-L. Drouin, F.A. Duncan, M. Dunford, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J.T.M. Goon, D.R. Grant, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, R. Henning, A. Hime, C. Howard, M.A. Howe, M. Huang, B. Jamieson, N.A. Jelley, J.R. Klein, M. Kos, A. Kruger, C. Kraus, C.B. Krauss, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, R. Martin, N. McCauley, A.B. McDonald, S. McGee, C. Mifflin, M.L. Miller, B. Monreal, J. Monroe, A.J. Noble, N.S. Oblath, C.E. Okada, H.M. O'Keefe, Y. Opachich, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, M.H. Schwendener, J.A. Secrest, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, M.W.E. Smith, T.J. Sonley, T.D. Steiger, L.C. Stonehill, N. Tagg, G. Tesic, N. Tolich, T. Tsui, R.G. Van de Water, B.A. VanDevender, C.J. Virtue, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, P. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang and K. Zuber Phys.Rev.D80:012001, 2009.

#### 13) AN INDEPENDENT MEASUREMENT OF THE TOTAL ACTIVE $^8\text{B}$ SOLAR NEUTRINO FLUX USING AN ARRAY OF $^3\text{He}$ PROPORTIONAL COUNTERS AT THE SUDBURY NEUTRINO OBSERVATORY

B. Aharmim, S.N. Ahmed, J.F. Amsbaugh, A.E. Anthony, J. Banar, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline, M.G. Boulay, T.J. Bowles, M.C. Browne, T.V. Bullard, T.H. Burritt, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox-Mobrand, C.A. Currat, X. Dai, H. Deng, J. Detwiler, M. DiMarco, P.J. Doe, G. Doucas, P.-L. Drouin, C.A. Duba, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, M.M. Fowler, N. Gagnon, J.V. Germani, A. Goldschmidt, J.T.M. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, A.A. Hamian, G.C. Harper, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R. Henning, A. Hime, C. Howard, M.A. Howe, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, A. Kruger, C. Kraus, C.B. Krauss, T.

Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, K. McBryde, N. McCauley, A.B. McDonald, S. McGee, C. Mifflin, G.G. Miller, M.L. Miller, B. Monreal, J. Monroe, B. Morissette, A. Myers, B.G. Nickel, A.J. Noble, N.S. Oblath, H.M. O’Keefe, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, M.H. Schwendener, J.A. Secrest, S.R. Seibert, O. Simard, J.J. Simpson, L. Sinclair, P. Skensved, M.W.E. Smith, T.D. Steiger, L.C. Stonehill, G. Te $\nu$ <sub>s</sub>i $\bar{c}$ , P.M. Thornewell, N. Tolich, T. Tsui, C.D. Tunnell, T. Van Wechel, R. Van Berg, B.A. VanDevender, C.J. Virtue, T.J. Walker, B.L. Wall, D. Waller, H. Wan Chan Tseung, J. Wendland, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber, arxiv:0806.0989, Phys. Rev. Lett. 101, 111301 (2008).

#### 14) THE SNO+ EXPERIMENT

SNO+ Collaboration (Mark C. Chen for the collaboration).

34th International Conference on High Energy Physics (ICHEP 2008), Philadelphia, Pennsylvania, arXiv:0810.3694 [hep-ex]

#### 15) A SEARCH FOR NEUTRINOS FROM THE SOLAR HEP REACTION AND THE DIFFUSE SUPERNOVA BACKGROUND WITH THE SUDBURY NEUTRINO OBSERVATORY.

B. Aharmim, S.N. Ahmed, A.E. Anthony, E.W. Beier, A. Bellerive, M. Bergevin, S.D. Biller, M.G. Boulay, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, G.A. Cox, C.A. Currat, X. Dai, F. Dalnoki-Veress, H. Deng, J. Detwiler, M. DiMarco, P.J. Doe, G. Doucas, P.-L. Drouin, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J.T.M. Goon, K. Graham, E. Guillian, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, R. Henning, A. Hime, C. Howard, M.A. Howe, M. Huang, P. Jagam, N.A. Jelley, J.R. Klein, L.L. Kormos, M. Kos, A. Kruger, C. Kraus, C.B. Krauss, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, J.C. Loach, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, R. Martin, N. McCauley, A.B. McDonald, S. McGee, C. Mifflin, K.K.S. Miknaitis, M.L. Miller, B. Monreal, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, H.M. O’Keefe, G.D. Orebi Gann, S.M. Oser, R. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, M.H. Schwendener, J.A. Secrest, S.R. Seibert, O. Simard, C.J. Sims, D. Sinclair, P. Skensved, R.G. Stokstad, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, R.G. Van de Water, B.A. VanDevender, C.J. Virtue, T.J. Walker, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber, Astrophysical Journal 653, 1545 (2006), nucl-ex/0607010 v2

#### 16) MEASUREMENT OF THE $\nu_e$ AND TOTAL $^8\text{B}$ SOLAR NEUTRINO FLUXES WITH THE SUDBURY NEUTRINO OBSERVATORY PHASE 1 DATA SET

B. Aharmim, Q.R. Ahmad, S.N. Ahmed, R.C. Allen, T.C. Andersen, J.D. Anglin, G. Buhler, J.C. Barton, E.W. Beier, M. Bercovitch, M. Bergevin, J. Bigu, S.D. Biller, R.A. Black, I. Blevis, R.J. Boardman, J. Boger, E. Bonvin, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, M.C. Browne, T.V. Bullard, T.H. Burritt, J. Cameron, Y.D. Chan, H.H. Chen, M. Chen, X. Chen, B.T. Cleveland, J.H.M. Cowan, D.F. Cowen, G.A. Cox, C.A. Currat, X. Dai, F. Dalnoki-Veress, W.F. Davidson, H. Deng, M. DiMarco, P.J. Doe, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, A.P. Ferraris, F. Fleurot, R.J. Ford, J.A. Formaggio, M.M. Fowler, K. Frame, E.D. Frank, W. Frati, N. Gagnon, J.V. Germani, S. Gil, A. Goldschmidt, J.T. M. Goon, K. Graham, D.R. Grant, E. Guillian, R.L. Hahn, A.L. Hallin, E.D. Hallman, A.S. Hamer, A.A. Hamian, W.B. Handler, R.U. Haq, C.K. Hargrove, P.J.

Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R. Henning, J.D. Hepburn, H. Heron, J. Hewett, A. Hime, C. Howard, M.A. Howe, M. Huang, J.G. Hykawy, M.C.P. Isaac, P. Jagam, B. Jamieson, N.A. Jelley, C. Jillings, G. Jonkmans, K. Kazkaz, P.T. Keener, K. Kirch, J.R. Klein, A.B. Knox, R.J. Komar, L.L. Kormos, M. Kos, R. Kouzes, A. Kruger, C. Kraus, C.B. Krauss, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, M. Lay, H.W. Lee, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, W. Locke, S. Luoma, J. Lyon, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, R. Martin, N. McCauley, A.B. McDonald, D.S. McDonald, K. McFarlane, S. McGee, G. McGregor, R. Meijer Drees, H. Mes, C. Mifflin, K.K.S. Miknaitis, M.L. Miller, G. Milton, B.A. Moffat, B. Monreal, M. Moorhead, B. Morrisette, C.W. Nally, M.S. Neubauer, F.M. Newcomer, H.S. Ng, B.G. Nickel, A.J. Noble, E.B. Norman, V.M. Novikov, N.S. Oblath, C.E. Okada, H.M. O’Keeffe, R.W. Ollerhead, M. Omori, J.L. Orrell, S.M. Oser, R. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, A. Roberge, B.C. Robertson, R.G.H. Robertson, S.S.E. Rosendahl, J.K. Rowley, V.L. Rusu, E. Saettler, A. Schulke, M.H. Schwendener, J.A. Secrest, H. Seifert, M. Shatkay, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, A.R. Smith, M.W.E. Smith, N. Starinsky, T.D. Steiger, R.G. Stokstad, L.C. Stonehill, R.S. Storey, B. Sur, R. Tafirout, N. Tagg, Y. Takeuchi, N.W. Tanner, R.K. Taplin, M. Thorman, P.M. Thornewell, N. Tolich, P.T. Trent, Y.I. Tserkovnyak, T. Tsui, C.D. Tunnell, R. Van Berg, R.G. Van de Water, C.J. Virtue, T.J. Walker, B.L. Wall, C.E. Waltham, H. Wan Chan Tseung, J.-X. Wang, D.L. Wark, J. Wendland, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, A. Wright, M. Yeh, and K. Zuber, *Physical Review C* 75, 045502 (2007), nucl-ex/0610020.

17) SNO AND THE NEW SNOLAB, A. B. McDonald, 12th International Workshop on Neutrino Telescopes: Twenty Years after the Supernova 1987A Neutrino Bursts Discovery, Venice, Italy, 6-9 Mar 2007. Published in “Venice 2007, Neutrino telescopes” 617-625

18) NEUTRINO PHYSICS, Proceedings of Twelfth Annual Workshop on New Worlds in Astroparticle Physics, Faro, Portugal, September, 2007, to be published.

19) SOLAR NEUTRINOS, SNO AND SNOLAB, A. B. McDonald, Proceedings of the SNOW2006 conference, Stockholm, Sweden, May, 2006, *Physica Scripta*, T125 (2006) 1.

20) A SEARCH FOR PERIODICITIES IN THE  $^8\text{B}$  SOLAR NEUTRINO FLUX MEASURED BY THE SUDBURY NEUTRINO OBSERVATORY.

B. Aharmim, S.N. Ahmed, A.E. Anthony, E.W. Beier, A. Bellerive, S.D. Biller, M.G. Boulay, M.G. Bowler, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, T. Costin, G.A. Cox, C.A. Currat, X. Dai, F. Dalnoki-Veress, H. Deng, J. Detwiler, P.J. Doe, R.S. Dosanjh, G. Doucas, C.A. Duba, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, J.A. Formaggio, K. Frame, W. Frati, B.G. Fulsom, N. Gagnon, J.T.M. Goon, K. Graham, D.R. Grant, R.L. Hahn, J.C. Hall, A.L. Hallin, E.D. Hallman, W.B. Handler, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, L. Heelan, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, A. Hime, C. Howard, M.A. Howe, M. Huang, E. Inrig, P. Jagam, N.A. Jelley, J.R. Klein, L.L. Kormos, M.S. Kos, A. Kruger, C. Kraus, C.B. Krauss, A.V. Krumins, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, N. McCauley, A.B. McDonald, S. McGee, G. McGregor, C. Mifflin, K.K.S. Miknaitis, C.W. Nally, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, J.L. Orrell, S.M. Oser, T. Ouvarova, C. Ouellet, S.J.M. Peeters, A.W.P. Poon, C.J.S. Pun, K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, S.S.E. Rosendahl, M.H. Schwendener, S.R. Seibert, O. Simard, C.J. Sims, D. Sinclair, P. Skensved, M.W.E. Smith, N. Starinsky, R.G. Stokstad, L.C. Stonehill, R. Tafirout, Y. Takeuchi, G. Tesic, M. Thomson, K.V. Tsang, T. Tsui, R. Van Berg, C.J. Virtue, B.L. Wall, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, M. Yeh and K. Zuber, *Physical Review D* 72 (2005) 052010.

21) ELECTRON ENERGY SPECTRA, FLUXES AND DAY-NIGHT ASYMMETRIES OF  $^8\text{B}$  SOLAR NEUTRINOS FROM MEASUREMENTS WITH NaCl DISSOLVED IN THE HEAVY WATER DETECTOR AT THE SUDBURY NEUTRINO OBSERVATORY.

B. Aharmim, S.N. Ahmed, A.E. Anthony, E.W. Beier, A. Bellerive, M. Bergevin, S.D. Biller, J. Boger, M.G. Boulay, M.G. Bowler, T.V. Bullard, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, G.A. Cox, C.A. Currat, X. Dai, F. Dalnoki-Veress, H. Deng, P.J. Doe, R.S. Dosanjh, G. Doucas, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, J.A. Formaggio, K. Frame, W. Frati, B.G. Fulsom, N. Gagnon, K. Graham, D.R. Grant, R.L. Hahn, J.C. Hall, A.L. Hallin, E.D. Hallman, W.B. Handler, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, L. Heelan, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, A. Hime, C. Howard, M.A. Howe, M. Huang, P. Jagam, N.A. Jelley, J.R. Klein, L.L. Kormos, M.S. Kos, A. Kruger, C. Kraus, C.B. Krauss, A.V. Krumins, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, N. McCauley, A.B. McDonald, S. McGee, G. McGregor, C. Mifflin, K.K.S. Miknaitis, B.A. Moffat, C.W. Nally, M.S. Neubauer, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, R.W. Ollerhead, J.L. Orrell, S.M. Oser, C. Ouellet, S.J.M. Peeters, A.W.P. Poon, K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, S.S.E. Rosendahl, V.L. Rusu, M.H. Schwendener, S.R. Seibert, O. Simard, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, M.W.E. Smith, N. Starinsky, R.G. Stokstad, L.C. Stonehill, R. Tafirout, Y. Takeuchi, G. Tesic, M. Thomson, M. Thorman, T. Tsui, R. Van Berg, R.G. Van de Water, C.J. Virtue, B.L. Wall, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, A. Wright, M. Yeh and K. Zuber, *Phys. Rev. C* 72 (2005) 055502.

22) SUDBURY NEUTRINO OBSERVATORY RESULTS

Invited paper for Nobel Symposium Number 129: Neutrino Physics, Enkoping, Sweden, August 19 - 24, 2004, *Phys.Scripta* T121:29-32, 2005.

23) EVIDENCE FOR NEUTRINO OSCILLATIONS I: SOLAR AND REACTOR NEUTRINOS

Invited paper for the International Nuclear Physics Conference INPC2005, Goteborg, Sweden, June 27 - July 2, 2004, *Nucl.Phys.A* 751:53-66, 2005.

24) SOLAR NEUTRINO MEASUREMENTS

A. B. McDonald, Invited article for a Focus Issue on Neutrino Physics, ([www.njp.org](http://www.njp.org)), *New J. Phys.* 6 (2004) 121, [astro-ph/0406253](http://arxiv.org/abs/astro-ph/0406253).

25) ELECTRON ANTINEUTRINO SEARCH AT THE SUDBURY NEUTRINO OBSERVATORY

B. Aharmim, S.N. Ahmed, E.W. Beier, A. Bellerive, S.D. Biller, J. Boger, M.G. Boulay, T.J. Bowles, S.J. Brice, T.V. Bullard, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, G.A. Cox, X. Dai, F. Dalnoki-Veress, P.J. Doe, R.S. Dosanjh, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, J.A. Formaggio, M.M. Fowler, K. Frame, W. Frati, B.G. Fulsom, N. Gagnon, K. Graham, D.R. Grant, R.L. Hahn, A.L. Hallin, E.D. Hallman, A.S. Hamer, W.B. Handler, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, A. Hime, M.A. Howe, P. Jagam, N.A. Jelley, J.R. Klein, L.L. Kormos, M.S. Kos, A. Kruger, C.B. Krauss, A.V. Krumins, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, N. McCauley, A.B. McDonald, S. McGee, G. McGregor, C. Mifflin, K.K.S. Miknaitis, G.G. Miller, B.A. Moffat, C.W. Nally, M.S. Neubauer, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, R.W. Ollerhead, J.L. Orrell, S.M. Oser, C. Ouellet, S.J.M. Peeters, A.W.P. Poon,

K. Rielage, B.C. Robertson, R.G.H. Robertson, E. Rollin, S.S.E. Rosendahl, V.L. Rusu, M.H. Schwendener, O. Simard, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, M.W.E. Smith, N. Starinsky, R.G. Stokstad, L.C. Stonehill, R. Tafirout, Y. Takeuchi, G. Tesic, M. Thomson, T. Tsui, R. Van Berg, R.G. Van de Water, C.J. Virtue, B.L. Wall, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, M. Yeh, K. Zuber, *Phys. Rev. D* 70 (2004) 093014.

26) SNEWS: THE SUPERNOVA EARLY WARNING SYSTEM

P. Antonioli, R. T. Fienberg, Fabrice Fleurot, Y. Fukuda, W. Fulgione, A. Habig, J. Heise, A. B. McDonald, C. Mills, T. Namba, L. J. Robinson, K. Scholberg, M. Schwendener, R. W. Sinnott, B. Stacey, Y. Suzuki, R. Tafirout, C. Vigorito, B. Viren, C. Virtue, and A. Zichichi, *New Journal of Physics*, 6 (2004) 114.

27) MEASUREMENT OF  $^{222}\text{Rn}$  DISSOLVED IN WATER AT THE SUDBURY NEUTRINO OBSERVATORY

I. Blevins, J. Boger, E. Bonvin, B.T. Cleveland, X. Dai, F. Dalnoki-Veress, G. Doucas, J. Farine, H. Fergani, D. Grant, R.L. Hahn, A.S. Hamer, C.K. Hargrove, H. Heron, P. Jagam, N.A. Jelley, C. Jillings, A.B. Knox, H.W. Lee, I. Levine, M. Liu, S. Majerus, A. McDonald, K. McFarlane, C. Mifflin, A.J. Noble, S. Noel, V.M. Novikov, J.K. Rowley, M. Shatkey, J.J. Simpson, D. Sinclair, B. Sur, J.X. Wang, M. Yeh, X. Zhu, *Nuclear Instruments and Methods*, 517 (2003) 139.

28) CONSTRAINTS ON NUCLEON DECAY VIA "INVISIBLE" DECAY MODES FROM THE SUDBURY NEUTRINO OBSERVATORY

S.N. Ahmed, A.E. Anthony, E.W. Beier, A. Bellerive, S.D. Biller, J. Boger, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, T.V. Bullard, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, G.A. Cox, X. Dai, F. Dalnoki-Veress, P.J. Doe, R.S. Dosanjh, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, J.A. Formaggio, M.M. Fowler, K. Frame, W. Frati, B.G. Fulsom, N. Gagnon, K. Graham, D.R. Grant, R.L. Hahn, J.C. Hall, A.L. Hallin, E.D. Hallman, A.S. Hamer, W.B. Handler, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, A. Hime, M.A. Howe, P. Jagam, N.A. Jelley, J.R. Klein, M.S. Kos, A.V. Kruminis, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, N. McCauley, A.B. McDonald, S. McGee, G. McGregor, C. Miin, K.K.S. Miknaitis, G.G. Miller, B.A. Moffat, C.W. Nally, M.S. Neubauer, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, R.W. Ollerhead, J.L. Orrell, S.M. Oser, C. Ouellet, S.J.M. Peeters, A.W.P. Poon, B.C. Robertson, R.G.H. Robertson, E. Rollin, S.S.E. Rosendahl, V.L. Rusu, M.H. Schwendener, O. Simard, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, M.W.E. Smith, N. Starinsky, R.G. Stokstad, L.C. Stonehill, R. Tafirout, Y. Takeuchi, G. Tesic, M. Thomson, M. Thorman, R. Van Berg, R.G. Van de Water, C.J. Virtue, B.L. Wall, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, M. Yeh, and K. Zuber. *Phys.Rev.Lett.* 92 (2004) 102004.

29) MEASUREMENT OF THE TOTAL ACTIVE  $^8\text{B}$  SOLAR NEUTRINO FLUX AT THE SUDBURY NEUTRINO OBSERVATORY WITH ENHANCED NEUTRAL CURRENT SENSITIVITY

S.N. Ahmed, A.E. Anthony, E.W. Beier, A. Bellerive, S.D. Biller, J. Boger, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, T.V. Bullard, Y.D. Chan, M. Chen, X. Chen, B.T. Cleveland, G.A. Cox, X. Dai, F. Dalnoki-Veress, P.J. Doe, R.S. Dosanjh, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, J.A. Formaggio, M.M. Fowler, K. Frame, , B.G.



Fulsom, N. Gagnon, K. Graham, D.R. Grant, R.L. Hahn, J.C. Hall, A.L. Hallin, E.D. Hallman, A.S. Hamer, W.B. Handler, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, R.J. Hemingway, A. Hime, M.A. Howe, P. Jagam, N.A. Jelley, J.R. Klein, M.S. Kos, A.V. Krumins, T. Kutter, C.C.M. Kyba, H. Labranche, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, S. Luoma, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, A.D. Marino, N. McCauley, A.B. McDonald, S. McGee, G. McGregor, C. Mifflin, K.K.S. Miknaitis, G.G. Miller, B.A. Moffat, C.W. Nally, B.G. Nickel, A.J. Noble, E.B. Norman, N.S. Oblath, C.E. Okada, R.W. Ollerhead, J.L. Orrell, S.M. Oser, C. Ouellet, S.J.M. Peeters, A.W.P. Poon, B.C. Robertson, R.G.H. Robertson, E. Rollin, S.S.E. Rosendahl, V.L. Rusu, M.H. Schwendener, O. Simard, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, M.W.E. Smith, N. Starinsky, R.G. Stokstad, L.C. Stonehill, R. Tafirout, Y. Takeuchi, G. Tesic, M. Thomson, M. Thorman, R. Van Berg, R.G. Van de Water, C.J. Virtue, B.L. Wall, D. Waller, C.E. Waltham, H. Wan Chan Tseung, D.L. Wark, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, M. Yeh, and K. Zuber, Phys.Rev.Lett. 92 (2004) 181301.

### 30) THE SUDBURY NEUTRINO OBSERVATORY AND SOLAR NEUTRINOS

A. B. McDonald, for the SNO Collaboration, Proceedings of the Conference on Neutrino Telescopes X, Venice, Italy, March, 2003.

### 31) SUMMARY OF SOLAR NEUTRINO MEASUREMENTS

A.B. McDonald, Proceedings of the Particles and Nuclei International Conference (PANIC03) conference, Kyoto, Japan, Sept, 2003.

### 32) ASTROPHYSICAL NEUTRINO TELESCOPES

A.B. McDonald, C. Spiering, S. Schoenert, E.T. Kearns and T. Kajita, invited review article, Rev.Sci.Instrum. 75 (2004) 293-316.

### 33) SOLVING THE SOLAR NEUTRINO PROBLEM

A.B. McDonald, J.R. Klein, D.L. Wark, Scientific American 288 Vol 4 (2003) 40.

### 34) SOLAR NEUTRINOS

A.B. McDonald Proceedings of Physics in Collision Conference, Stanford, California, June, 2002, eConf C020620 (2002) SAAT02, hep-ex/0209056

### 35) DIRECT EVIDENCE FOR NEUTRINO FLAVOR TRANSFORMATION FROM NEUTRAL CURRENT INTERACTIONS IN THE SUDBURY NEUTRINO OBSERVATORY

Q.R. Ahmad, R.C. Allen, T.C. Andersen, J.D. Anglin, J.C. Barton, E.W. Beier, M. Bercovitch, J. Bigu, S.D. Biller, R.A. Black, I. Blevis, R.J. Boardman, J. Boger, E. Bonvin, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, M.C. Browne, T.V. Bullard, G. Buhler, J. Cameron, Y.D. Chan, H.H. Chen, M. Chen, X. Chen, B.T. Cleveland, E.T.H. Clifford, J.H.M. Cowan, D.F. Cowen, G.A. Cox, X. Dai, F. Dalnoki-Veress, W.F. Davidson, P.J. Doe, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, A.P. Ferraris, R.J. Ford, J.A. Formaggio, M.M. Fowler, K. Frame, E.D. Frank, W. Frati, N. Gagnon, J.V. Germani, S. Gil, K. Graham, D.R. Grant, R.L. Hahn, A.L. Hallin, E.D. Hallman, A.S. Hamer, A.A. Hamian, W.B. Handler, R.U. Haq, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, J.D. Hepburn, H. Heron, J. Hewett, A. Hime, J.G. Hykawy, M.C.P. Isaac, P. Jagam, N.A. Jelley, C. Jillings, G. Jonkmans, K. Kazkaz, P.T. Keener, J.R. Klein, A.B. Knox, R.J. Komar, R. Kouzes, T. Kutter, C.C.M. Kyba, J. Law, I.T. Lawson, M. Lay, H.W. Lee, K.T. Lesko, J.R. Leslie, I. Levine, W. Locke, S. Luoma, J. Lyon, S. Majerus, H.B. Mak, J. Maneira, J. Manor, A.D. Marino, N. McCauley, D.S. McDonald, A.B. McDonald, K. McFarlane, G.

McGregor, R. Meijer Drees, C. Mifflin, G.G. Miller, G. Milton, B.A. Moffat, M. Moorhead, C.W. Nally, M.S. Neubauer, F.M. Newcomer, H.S. Ng, A.J. Noble, E.B. Norman, V.M. Novikov, M. O'Neill, C.E. Okada, R.W. Ollerhead, M. Omori, J.L. Orrell, S.M. Oser, A.W.P. Poon, T.J. Radcliffe, A. Roberge, B.C. Robertson, R.G.H. Robertson, S.S.E. Rosendahl, J.K. Rowley, V.L. Rusu, E. Saettler, K.K. Schaffer, M.H. Schwendener, A. Schulke, H. Seifert, M. Shatkay, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, A.R. Smith, M.W.E. Smith, T. Spreitzer, N. Starinsky, T.D. Steiger, R.G. Stokstad, L.C. Stonehill, R.S. Storey, B. Sur, R. Tafirout, N. Tagg, N.W. Tanner, R.K. Taplin, M. Thorman, P.M. Thornewell, P.T. Trent, Y.I. Tserkovnyak, R. Van Berg, R.G. Van de Water, C.J. Virtue, C.E. Waltham, J.-X. Wang, D.L. Wark, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, and M. Yeh, Phys. Rev. Lett. 89 (2002) 011301.

### 36) MEASUREMENT OF DAY AND NIGHT NEUTRINO SPECTRA AT SNO AND CONSTRAINTS ON NEUTRINO MIXING PARAMETERS

Q.R. Ahmad, R.C. Allen, T.C. Andersen, J.D. Anglin, J.C. Barton, E.W. Beier, M. Bercovitch, J. Bigu, S.D. Biller, R.A. Black, I. Blevis, R.J. Boardman, J. Boger, E. Bonvin, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, M.C. Browne, T.V. Bullard, G. Buhler, J. Cameron, Y.D. Chan, H.H. Chen, M. Chen, X. Chen, B.T. Cleveland, E.T.H. Clifford, J.H.M. Cowan, D.F. Cowen, G.A. Cox, X. Dai, F. Dalnoki-Veress, W.F. Davidson, P.J. Doe, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, M. Dunford, J.A. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, A.P. Ferraris, R.J. Ford, J.A. Formaggio, M.M. Fowler, K. Frame, E.D. Frank, W. Frati, N. Gagnon, J.V. Germani, S. Gil, K. Graham, D.R. Grant, R.L. Hahn, A.L. Hallin, E.D. Hallman, A.S. Hamer, A.A. Hamian, W.B. Handler, R.U. Haq, C.K. Hargrove, P.J. Harvey, R. Hazama, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, J.D. Hepburn, H. Heron, J. Hewett, A. Hime, J.G. Hykawy, M.C.P. Isaac, P. Jagam, N.A. Jelley, C. Jillings, G. Jonkmans, K. Kazkaz, P.T. Keener, J.R. Klein, A.B. Knox, R.J. Komar, R. Kouzes, T. Kutter, C.C.M. Kyba, J. Law, I.T. Lawson, M. Lay, H.W. Lee, K.T. Lesko, J.R. Leslie, I. Levine, W. Locke, S. Luoma, J. Lyon, S. Majerus, H.B. Mak, J. Maneira, J. Manor, A.D. Marino, N. McCauley, D.S. McDonald, A.B. McDonald, K. McFarlane, G. McGregor, R. Meijer Drees, C. Mifflin, G.G. Miller, G. Milton, B.A. Moffat, M. Moorhead, C.W. Nally, M.S. Neubauer, F.M. Newcomer, H.S. Ng, A.J. Noble, E.B. Norman, V.M. Novikov, M. O'Neill, C.E. Okada, R.W. Ollerhead, M. Omori, J.L. Orrell, S.M. Oser, A.W.P. Poon, T.J. Radcliffe, A. Roberge, B.C. Robertson, R.G.H. Robertson, S.S.E. Rosendahl, J.K. Rowley, V.L. Rusu, E. Saettler, K.K. Schaffer, M.H. Schwendener, A. Schulke, H. Seifert, M. Shatkay, J.J. Simpson, C.J. Sims, D. Sinclair, P. Skensved, A.R. Smith, M.W.E. Smith, T. Spreitzer, N. Starinsky, T.D. Steiger, R.G. Stokstad, L.C. Stonehill, R.S. Storey, B. Sur, R. Tafirout, N. Tagg, N.W. Tanner, R.K. Taplin, M. Thorman, P.M. Thornewell, P.T. Trent, Y.I. Tserkovnyak, R. Van Berg, R.G. Van de Water, C.J. Virtue, C.E. Waltham, J.-X. Wang, D.L. Wark, N. West, J.B. Wilhelmy, J.F. Wilkerson, J.R. Wilson, P. Wittich, J.M. Wouters, and M. Yeh, Phys. Rev. Lett. 89 (2002) 011306.

### 37) MEASUREMENT OF THE RATE OF $\nu_e + d \rightarrow p + p + e^-$ PRODUCED BY $^8\text{B}$ SOLAR NEUTRINOS AT THE SUDBURY NEUTRINO OBSERVATORY

Q.R. Ahmad, R.C. Allen, T.C. Andersen, J.D. Anglin, G. Buehler, J.C. Barton, E.W. Beier, M. Bercovitch, J. Bigu, S. Biller, R.A. Black, I. Blevis, R.J. Boardman, J. Boger, E. Bonvin, M.G. Boulay, M.G. Bowler, T.J. Bowles, S.J. Brice, M.C. Browne, T.V. Bullard, T.H. Burritt, K. Cameron, J. Cameron, Y.D. Chan, M. Chen, H.H. Chen, X. Chen, M.C. Chon, B.T. Cleveland, E.T.H. Clifford, J.H.M. Cowan, D.F. Cowen, G.A. Cox, Y. Dai, X. Dai, F. Dalnoki-Veress, W.F. Davidson, P.J. Doe, G. Doucas, M.R. Dragowsky, C.A. Duba, F.A. Duncan, J. Dunmore, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, A.P. Ferraris, R.J. Ford, M.M. Fowler, K. Frame, E.D. Frank, W. Frati, J.V. Germani, S. Gil, A. Goldschmidt, D.R. Grant, R.L. Hahn, A.L. Hallin, E.D. Hallman, A. Hamer, A.A. Hamian, R.U. Haq, C.K. Hargrove, P.J. Harvey, R. Hazama, R. Heaton, K.M. Heeger, W.J. Heintzelman, J. Heise, R.L. Helmer, J.D. Hepburn, H. Heron, J. Hewett, A. Hime, M. Howe, J.G. Hykawy, M.C.P. Isaac, P. Jagam, N.A. Jelley, C. Jillings, G. Jonkmans, J. Karn, P.T.

Keener, K. Kirch, J.R. Klein, A.B. Knox, R.J. Komar, R. Kouzes, T. Kutter, C.C.M. Kyba, J. Law, I.T. Lawson, M. Lay, H.W. Lee, K.T. Lesko, J.R. Leslie, I. Levine, W. Locke, M.M. Lowry, S. Luoma, J. Lyon, S. Majerus, H.B. Mak, A.D. Marino, N. McCauley, A.B. McDonald, D.S. McDonald, K. McFarlane, G. McGregor, W. McLatchie, R. Meijer Drees, H. Mes, C. Mifflin, G.G. Miller, G. Milton, B.A. Moffat, M. Moorhead, C.W. Nally, M.S. Neubauer, F.M. Newcomer, H.S. Ng, A.J. Noble y, E.B. Norman, V.M. Novikov, M. O'Neill, C.E. Okada, R.W. Ollerhead, M. Omori, J.L. Orrell, S.M. Oser, A.W.P. Poon, T.J. Radcliffe, A. Roberge, B.C. Robertson, R.G.H. Robertson, J.K. Rowley, V.L. Rusu, E. Saettler, K.K. Schaer, A. Schuelke, M.H. Schwendener, H. Seifert, M. Shatkay, J.J. Simpson, D. Sinclair, P. Skensved, A.R. Smith, M.W.E. Smith, N. Starinsky, T.D. Steiger, R.G. Stokstad, R.S. Storey, B. Sur, R. Tafirout, N. Tagg, N.W. Tanner, R.K. Taplin, M. Thorman, P. Thornewell P.T. Trent, Y.I. Tserkovnyak, R. Van Berg, R.G. Van de Water, C.J. Virtue, C.E. Waltham, J.-X. Wang, D.L. Wark , N. West, J.B. Wilhelmy, J.F. Wilkerson, J. Wilson, P. Wittich, J.M. Wouters, M. Yeh (The SNO Collaboration), Physical Review Letters 87, 07301 1-6 (2001)

### 38) THE SUDBURY NEUTRINO OBSERVATORY

J. Boger, R.L. Hahn, J.K. Rowley , A.L. Carter, B. Hollebhone, D. Kessler, I. Blevis, F. Dalnoki-Veress, A. DeKok, J. Farine, D.R. Grant, C.K. Hargrove, G. Laberge, I. Levine, K. McFarlane, H. Mes, A.T. Noble, V.M. Novikov, M. O'Neill, M. Shatkay, C. Shewchuk, D. Sinclair , E.T.H. Clifford, R. Deal, E.D. Earle, E. Gaudette, G. Milton, B.Sur, J. Bigu, J.H.M. Cowan, D.L. Clu , E.D. Hallman, R.U. Haq, J. Hewett, J.G. Hykawy, G. Jonkmans, R. Michaud, A. Roberge, J. Roberts, E. Saettler, M.H. Schwendener, H. Seifert, D. Sweezey, R. Tafirout, C.J. Virtue, D.N. Beck, Y.D. Chan, X. Chen, M.R. Dragowsky, F.W. Dycus, J. Gonzalez, M.C.P. Isaac, Y. Kajiyama, G.W. Koehler, K.T. Lesko, M.C. Moebus, E.B. Norman, C.E. Okada, A.W.P. Poon, P. Purgalis, A. Schuelke, A.R. Smith, R.G. Stokstad, S. Turner, I. Zliven, J.M. Anaya, T.J. Bowles, S.J. Brice, Ernst-Ingo Esch, M.M. Fowler, Azriel Goldschmidt, A. Hime, A.F. McGirt, G.G. Miller, W.A. Teasdale, J.B. Wilhelmy, J.M. Wouters, J.D. Anglin, M. Bercovitch, W.F. Davidson, R.S. Storey, S. Biller, R.A. Black, R.J. Boardman, M.G. Bowler, J. Cameron, B. Cleveland, A.P. Ferraris, G. Doucas, H. Heron, C. Howard, N.A. Jelley, A.B. Knox, M. Lay, W. Locke, J. Lyon, S. Majerus, M. Moorhead, M. Omori, N.W. Tanner, R.K. Taplin, M. Thorman, D.L. Wark, N. West, J.C. Barton, P.T. Trent, R. Kouzes, M.M. Lowry, A.L. Bell, E. Bonvin, M. Boulay, M. Dayon, F. Duncan, L.S. Erhardt, H.C. Evans, G.T. Ewan, R. Ford, A. Hallin, A. Hamer, P.M. Hart, P.J. Harvey, D. Haslip, C.A.W. Hearn, R. Heaton, J.D. Hepburn, C.J. Jillings, E.P. Korpach, H.W. Lee, J.R. Leslie, M.-Q. Liu, H.B. Mak, A.B. McDonald, J.D. MacArthur, W. McLatchie, B.A. Moffat, S. Noel, T.J. Radcliffe, B.C. Robertson, P. Skensved, R.L. Stevenson, X. Zhu, S.Gil, J. Heise, R.L. Helmer, R.J. Komar, C.W. Nally, H.S. Ng, C.E. Waltham, R.C. Allen, G. Buhler, H. H. Chen, G. Aardsma, T. Andersen, K. Cameron, M.C. Chon, R.H. Hanson, P. Jagam, J. Karn, J. Law, R.W. Ollerhead, J.J. Simpson, N. Tagg, J.-X. Wang, C. Alexander, E.W. Beier, J.C. Cook, D.F. Cowen, E.D. Frank, W. Frati, P.T. Keener, J.R. Klein, G. Mayers, D.S. McDonald, M.S. Neubauer, F.M. Newcomer, R.J. Pearce, R.G. Van de Water, R. Van Berg, P. Wittich, Q.R. Ahmad, J.M. Beck, M.C. Browne, T.H. Burritt, P.J. Doe, C.A. Duba, S.R. Elliott, J.E. Franklin, J.V. Germani, P. Green, A.A. Hamian, K.M. Heeger, M. Howe, R. Meijer Drees, A. Myers, R.G.H. Robertson, M.W.E. Smith, T.D. Steiger, T. Van Wechel, J.F. Wilkerson, Nucl. Instrum. Meth. A449, 172, 2000.

### 39) THE <sup>16</sup>N CALIBRATION SOURCE FOR THE SUDBURY NEUTRINO OBSERVATORY

M.R. Dragowsky, A. Hamer, Y.D. Chan, R. Deal, E.D. Earle, W. Frati, E. Gaudette, A. Hallin, C. Hearn, J. Hewett, G. Jonkmans, Y. Kajiyama, A.B. McDonald, B.A. Moffat, E.B. Norman, B. Sur, N. Tagg, Nuclear Instruments and Methods-A481 (2002) 284-296.

40) SOLAR NEUTRINO MEASUREMENTS

Topics in Astroparticle and Underground Physics, Assergi, Italy, 2001, Nucl.Phys.Proc.Suppl.110 (2001) 219-225.

41) MEASUREMENT OF CC INTERACTIONS PRODUCED BY  $^8\text{B}$  SOLAR NEUTRINOS AT SNO.

By the SNO Collaboration (A.B. McDonald *et al.*) International Europhysics Conference on High-Energy Physics (HEP 2001), Budapest, Hungary, 12-18 Jul 2001. Published in "Budapest 2001, High energy physics" hep2001/186

42) FIRST NEUTRINO OBSERVATIONS FROM THE SUDBURY NEUTRINO OBSERVATORY  
A.B. McDonald, for the SNO Collaboration

Proceedings of the XIX International Conference on Neutrino Physics and Astrophysics, Sudbury, Canada, Nucl.Phys.Proc.Suppl. 91 (2000) 21-28

43) THE SUDBURY NEUTRINO OBSERVATORY PROJECT

A.B. McDonald

Proceedings of the XVII International Conference on Neutrino Physics and Astrophysics, Takayama, Japan, Nuc. Phys. B (Proc. Suppl.) 77, 43, 1999.

44) SOLAR NEUTRINO EXPERIMENTS: THE NEXT GENERATION

J.N. Bachall, F. Calaprice, A.B. McDonald, Y. Totsuka

Physics Today, July, 1996

45) THE SUDBURY NEUTRINO OBSERVATORY PROJECT

A.B. McDonald

Proceedings of the XVII International Conference on Neutrino Physics and Astrophysics Helsinki, Finland. June 13-19, 1996

46) FUTURE SOLAR NEUTRINO EXPERIMENTS

A.B. McDonald

Proceedings of the International Conference on Theoretical and Phenomenological Aspects of Underground Physics (TAUP 95), Toledo, Spain, 1995  
Nuclear Physics B 48 (1996) 357-362, North-Holland

47) NEUTRINO ASTROPHYSICS WITH SNO

A.B. McDonald

Proceedings of the Ninth Lake Louise Winter Institute, edited by A. Astbury *et al.* (World Scientific, Singapore, 1994) p. 1.

48) PERSPECTIVES ON SOLAR NEUTRINO EXPERIMENTS

A.B. McDonald

Nuclear Physics B 35 (1994) 340-350, North-Holland

49) FUTURE SOLAR NEUTRINO EXPERIMENTS

A.B. McDonald

Relativistic Astrophysics and Particle Cosmology, Annals of the New York Academy of Sciences, Vol. 688, (1993) pp. 605-611

50) NEUTRINO ASTRONOMY

A.B. McDonald

Proceedings of the 23rd Int. Cosmic Ray Conf., Calgary, AB, 1993.

51)  $^{222}\text{Rn}$  EMANATION INTO VACUUM

H. Lee, M. Liu, A.B. McDonald, Nucl. Instr. and Methods in Physics Research A329 (1993), pp. 291-298.

52) NEUTRINO ASTROPHYSICS EXPERIMENTS

A.B. McDonald  
Physics in Canada, Vol. 48, No.2, 120 (1992)

53) THE SUDBURY NEUTRINO OBSERVATORY

A.B. McDonald  
Proceedings of the Franklin Institute Symposium on Nuclear Astrophysics. 1992.

54) REVIEW OF RESULTS FROM SOLAR NEUTRINO EXPERIMENT

A.B. McDonald.  
Proceedings of Particles and Fields, '91, World Scientific, (1991) p. 51

55) SOLAR NEUTRINOS

McGraw Hill Yearbook of Science and Technology, 1990.

56) NUCLEAR TESTS OF FUNDAMENTAL INTERACTIONS

A. B. McDonald  
Can. J. Phys., Vol. 67, No. 8, 785-791 (1989)

57) MEASUREMENT OF  $^3\text{He}$  DEPOLARIZATION RATES DURING BOMBARDMENT WITH  
A  $^4\text{He}$  BEAM

K. P. Coulter, A. B. McDonald, G. D. Cates, W. Happer and T. E. Chupp,  
Nucl. Instrum. Meth., Vol.A276, 29-34 (1989)

58) FACILITY FOR PARITY AND TIME REVERSAL EXPERIMENTS WITH INTENSE  
EPITHERMAL (eV) NEUTRON BEAMS

C. D. Bowman, J. D. Bowman, P. Herczeg, J. Szymanski, V. W. Yuan, J. M. Anaya, R. Mortensen,  
H. Postma, P. P. J. Delheij, O.K. Baker, C. R. Gould, D. G. Haase, G. E. Mitchell, N. R. Roberson, X.  
Zhu, A. B. McDonald, D. Benton, B. Tippens and T E. Chupp  
Hyperfine Interactions, Vol. 43, 119-126 (1988)

59) MEASUREMENTS OF PARITY VIOLATION IN THE PHOTO DISINTEGRATION OF  
DEUTERIUM AND IN THE PRODUCTION OF BREMSSTRAHLUNG ON TANTALUM

E. D. Earle, A. B. McDonald, S. Kidner, E. T. H. Clifford, J. Hill, S. Keech, T. Chupp, M. Schneider  
Canadian Journal of Physics, Vol. 66, 534 (1988)

60) STUDY OF THE  $^{127}\text{I}(^3\text{He,t})^{127}\text{Xe}$  REACTION WITH RELEVANCE TO NEUTRINO  
DETECTION

A.E. Champagne, R.T. Kouzes, A.B. McDonald, M.M. Lowry, D.R. Benton, K.P. Coulter, Z.Q. Mao  
Phys. Rev. C 39, 248 (1988)

61) THE DECAY OF THE FIRST ISOBARIC ANALOG STATE IN  $^{69}\text{Ge}$

A.E. Champagne, R.T. Kouzes, M.M. Lowry, A.B. McDonald, Z. Mao  
Phys. Rev. C 38, 2430 (1988)

- 62) NEUTRON POLARIZATION WITH POLARIZED  $^3\text{He}$   
K.P. Coulter, A.B. McDonald, W. Happer, T. Chupp, M.E. Wagshul  
Nucl. Instr. & Meth. A270, 90 (1988)
- 63) GAMMA DECAYS OF ISOBARIC ANALOG STATES RELEVANT TO NEUTRINO  
DETECTION  
A.E. Champagne, G.E. Dodge, R.T. Kouzes, M.M. Lowry, A.B. McDonald, M.W. Roberson  
Phys. Rev. C38, 900 (1988)
- 64) NEUTRON POLARIZATION WITH POLARIZED  $^3\text{He}$   
K.P. Coulter, A.B. McDonald, W. Happer, T. Chupp, M.E. Wagshul  
Proceedings of the Workshop on Time Reversal Tests with Neutrons, TUNL, N.C. (1987), Ed. R.  
Roberson, C. Gould, D. Bowman
- 65) POLARIZED, HIGH DENSITY, GASEOUS  $^3\text{He}$  TARGETS  
T.E. Chupp, M.E. Wagshul, K.P. Coulter, A.B. McDonald, W. Happer  
Phys. Rev. C36, 2244, (1987)
- 66) THE WEAK PION-NUCLEON COUPLING STRENGTH: A NEW CONSTRAINT FROM  
PARITY MIXING IN  $^{18}\text{F}$   
S.A. Page, H.C. Evans, G.T. Ewan, S.P. Kwan, J.R. Leslie, J.D. MacArthur, W. McLatchie, P.  
Skensved, S.S. Wang, H.B. Mak, A.B. McDonald, C.A. Barnes, T.K. Alexander, E.T.H. Clifford  
Phys. Rev. C35, 1119 (1987)
- 67) ELECTRON CAPTURE DECAY OF  $^{81}\text{Kr}$   
M.M. Lowry, R.T. Kouzes, F. Loeser, A.B. McDonald, R.A. Naumann  
Phys. Rev. C35, 1950 (1987)
- 68) LIMITS ON AXIONS FROM NUCLEAR DECAYS  
A.L. Hallin, F.P. Calaprice, R.W. Dunford, A.B. McDonald, G.C. Paulson  
Contribution to Ninth Conference on the Application of Accelerators in Research and Industry,  
Denton, Texas (10-12 November 1986),  
Nucl. Instr. and Method. B24, 276 (1987).
- 69) A HEAVY WATER CHERENKOV DETECTOR TO STUDY  $^8\text{B}$  SOLAR NEUTRINOS  
H.H. Chen, R.C. Allen, P.J. Doe, H.C. Evans, G.T. Ewan, H.W. Lee, J.R. Leslie, J.D. MacArthur,  
H.-B. Mak, W. McLatchie, B.C. Robertson, P. Skensved, D. Sinclair, J.D. Anglin, M. Bercovitch,  
W.F. Davidson, C.K. Hargrove, R.S. Storey, G. Aardsma, P. Jagam, J.J. Simpson, E.D. Storey, E.D.  
Hallman, A.B. McDonald, A.L. Carter, D. Kessler  
Proceedings Snowmass Summer Workshop, July 1986 (AIP Conference Proceedings).
- 70) THE SUDBURY  $\text{D}_2\text{O}$  NEUTRINO DETECTOR  
E.D. Earle, G.T. Ewan, H.W. Lee, H.-B. Mak, B.C. Robertson, R.C. Allen, H.H. Chen, P.J. Doe, D.  
Sinclair, W.F. Davidson, C. Hargrove, R.S. Storey, G. Aardsma, P. Jagam, J.J. Simpson, E.D.  
Hallman, A.B. McDonald, A.L. Carter, D. Kessler  
Proceedings International Symposium on Weak and Electromagnetic Interactions with Nuclei,  
Heidelberg, 1-5 July, 1986, (Springer-Verlag).
- 71) CANADIAN UNDERGROUND PROJECT - SUDBURY NEUTRINO OBSERVATORY

G.T. Ewan, H.-B. Mak, B.C. Robertson, R.C. Allen, H.H. Chen, P.J. Doe, D. Sinclair, W.F. Davidson, C.K. Hargrove, R.S. Storey, E.D. Earle, G. Aardsma, P. Jagam, J.J. Simpson, E.D. Hallman, A.B. McDonald, A.L. Carter, D. Kessler  
Proceedings Seventh Workshop on Grand Unification ICOBAN '86, Toyama, Japan, April 1986.

72) A D<sub>2</sub>O CERENKOV DETECTOR FOR SOLAR NEUTRINOS

E.D. Earle, G.T. Ewan, H.W. Lee, H.-B. Mak, B.C. Robertson, R.C. Allen, H.H. Chen, P.J. Doe, D. Sinclair, W.F. Davidson, C. Hargrove, R.S. Storey, G. Aardsma, P. Jagam, J.J. Simpson, E.D. Hallman, A.B. McDonald, A.L. Carter, D. Kessler  
Proceedings Second Conference on the Intersections between Particle and Nuclear Physics, Lake Louise, 26-31 May, 1986; AIP Conference Proceedings, No. 150 (American Institute of Physics, New York (1986), p. 1094.

73) SNO: THE SUDBURY NEUTRINO OBSERVATORY

J.J. Simpson, G.T. Ewan, H.-B. Mak, B.C. Robertson, R.C. Allen, H.C. Chen, P.J. Doe, D. Sinclair, W.F. Davidson, R.S. Storey, E.D. Earle, P. Jagam, E.D. Hallman, A.B. McDonald, A.L. Carter, D. Kessler  
Proceedings VIth Moriond Workshop on Massive Neutrinos in Particle Physics and Astrophysics, Tignes, France, January 1986.

74) PROPOSAL TO BUILD A NEUTRINO OBSERVATORY IN SUDBURY, CANADA

D. Sinclair, A.L. Carter, D. Kessler, E.D. Earle, P. Jagam, J.J. Simpson, R.C. Allen, H.H. Chen, P.J. Doe, E.D. Hallman, W.F. Davidson, A.B. McDonald, R.S. Storey, G.T. Ewan, H.-B. Mak, B.C. Robertson  
Il Nuovo Cimento C9, 308 (1986)

75) MEASUREMENT OF PARITY VIOLATION IN THE TOTAL CROSS SECTION OF 800 MeV PROTONS ON WATER

R.W. Harper, V. Yuan, H. Frauenfelder, J.D. Bowman, R. Carlini, R.E. Mischke, D.E. Nagle, R.L. Talaga, A.B. McDonald  
Phys. Rev. D31, 1151 (1986)

76) MEASUREMENT OF PARITY NONCONSERVATION IN THE PROTON-PROTON TOTAL CROSS SECTION AT 800 MeV

V. Yuan, H. Frauenfelder, R.W. Harper, J.K.D. Bowman, R. Carlini, D.W. MacArthur, R.E. Mischke, D.E. Nagle, R.L. Talaga, A.B. McDonald  
Phys. Rev. Lett. 57, 1680 (1986)

77) PARITY VIOLATION IN THE PHOTO DISINTEGRATION OF DEUTERIUM

A.B. McDonald, E.D. Earle, S.H. Kidner, E.T.H. Clifford, J.J. Hill, M.B. Schneider, T.C. Chupp  
Proceedings of 7th International Symposium on High Energy Spin Physics  
Protvino (USSR) 22-27 September 1986 (November 1986)

78) RESTRICTIONS ON A 1.7 MeV AXION FROM NUCLEAR PAIR TRANSITIONS

A.L. Hallin, F.P. Calaprice, R.W. Dunford, A.B. McDonald  
Phys. Rev. Lett. 57, 2105 (1986)

79) THRESHOLD STATES IN <sup>26</sup>Al REVISITED

A.E. Champagne, A.B. McDonald, T.F. Wang, A.J. Howard, P.V. Magnus, P.D. Parker  
Nucl. Phys. A451, 498-508 (1986)

- 80) PARITY MIXING OF  $O^+$  AND  $O^-$  LEVELS IN  $^{18}\text{F}$   
H.C. Evans, G.T. Ewan, S.P. Kwan, J.R. Leslie, J.D. MacArthur, H.B. Mak, W. McLatchie, S.A. Page, P. Skensved, S.S. Wang, A.B. McDonald, C.A. Barnes, T.K. Alexander, E.T.H. Clifford  
Phys. Rev. Lett. 55, 791 (1985)
- 81) THE TOTAL WIDTH OF THE 5.17 MeV  $1^-$  STATE IN  $^{14}\text{O}$  AND THE HOT-CNO CYCLE  
T.E. Chupp, R.T. Kouzes, A.B. McDonald, P.D. Parker, T.F. Wang, A. Howard  
Phys. Rev. C31, No. 3, 1023 (1985)
- 82) MEASUREMENTS OF ATOMIC LEVEL WIDTHS IN THULIUM: EFFECT ON  
MEASUREMENTS OF NEUTRINO MASS FROM TRITIUM BETA DECAY SPECTRA  
A.B. McDonald, P.T. Springer, T.E. Chupp, M.L. Tate, C.L. Bennett  
Phys. Rev. C31, No. 1, 197 (1985)
- 83) UPPER LIMIT ON THE ISOVECTOR PARITY-VIOLATING DECAY WIDTH OF THE  $O^+$ ,  
 $T=1$  STATE OF  $^6\text{Li}$   
R.G.H. Robertson, P. Dyer, R.C. Melin, T.J. Bowles, A.B. McDonald, G.C. Ball, W.G. Davies, E.D. Earle  
Phys. Rev. C29, 755 (1984)
- 84) DEVELOPMENT OF A TARGET OF POLARIZED  $^{21}\text{Ne}$  NUCLEI  
T.E. Chupp, W. Happer, A.B. McDonald  
Proceedings of the Workshop on Polarized Targets in Storage Rings, Argonne National Laboratory  
(1984)
- 85) MEASUREMENT OF THE ELECTRON CAPTURE BRANCHING RATIO OF  $^7\text{Be}$  USING  
INTERNAL BREMSSTRAHLUNG  
D.A. Knapp, A.B. McDonald, C.L. Bennett  
Nucl. Phys. A411, 195 (1983)
- 86) PARITY MIXING IN  $^{21}\text{Ne}$ : EVIDENCE FOR WEAK NEUTRAL CURRENTS IN NUCLEI  
E.D. Earle, A.B. McDonald, E.G. Adelberger, K.A. Snover, H.E. Swanson, R. von Lintig, H.B. Mak, C.A. Barnes  
Proceedings of the International Conference on Nuclear Structure, Amsterdam (1982)  
Nucl. Phys. A396, 221 (1983)
- 87) PARITY VIOLATION IN NUCLEAR INTERACTIONS  
A.B. McDonald  
Proceedings of the 1982 LAMPF Users Meeting, Los Alamos, New Mexico
- 88) POLARIZED PHOTONS FOR A MEASUREMENT OF PARITY VIOLATION IN  
DEUTERIUM  
A.B. McDonald, E.D. Earle, E.T.H. Clifford  
Invited paper on High Energy Spin Physics  
1982 AIP Conference Proceedings No. 95, edited by G.M. Bunce, p. 586
- 89) OBSERVATION OF THE CAPTURE REACTION  $^2\text{H}(\alpha,\gamma)^6\text{Li}$  AND ITS ROLE IN  
PRODUCTION OF  $\text{Li}^6$  IN THE BIG BANG  
R.G.H. Robertson, P. Dyer, R.E. Warner, R.C. Melin, T.J. Bowles, A.B. McDonald, G.C. Ball,  
W.G. Davies, E.D. Earle  
Phys. Rev. Lett. 47, 1867 (1981)



- 90) MEASUREMENT OF PAIR EMISSION FROM THE 2.8 MeV PARITY MIXED DOUBLET OF  $^{21}\text{Ne}$   
A.B. McDonald, E.D. Earle, J.J. Simpson, R.G.H. Robertson, H.B. Mak  
Phys. Rev. Lett. 47, 1720 (1981)
- 91) PARITY VIOLATION - THE np SYSTEM AT LOW ENERGY  
A.B. McDonald  
Invited paper on Polarization Phenomena in Nuclear Physics  
Proceedings of the AIP Conference, Santa Fe, California (1980) 69, 1358 (1980)
- 92) AN EXPERIMENT TO MEASURE PARITY VIOLATION IN THE  $^2\text{H}(\gamma, n)^1\text{H}$  REACTION  
E.D. Earle, A.B. McDonald, J.W. Knowles  
Ibid, p. 1436
- 93) GAMMA-RAY LIFETIMES FOR PARITY DOUBLETS IN  $^{41}\text{K}$ ,  $^{41}\text{Ca}$   
S.K. Saha, M.J. Maynard, B.C. Robertson, A.B. McDonald, E.D. Earle  
Phys. Rev. C21, 2322 (1980)
- 94) THE  $J=3^-$  DOUBLET AT EX=6241 keV IN  $^{18}\text{F}$ : ISOSPIN MIXING  
W. Kieser, R.E. Azuma, I. Berka, K.P. Jackson, A.B. McDonald, H.B. Mak, W. McLatchie  
Nucl. Phys. A327, 172 (1979)
- 95) HIGH-SPIN STATES IN THE ODD-ODD NUCLEUS  $^{212}\text{At}$   
T.P. Sjoreen, U. Garg, D.P. Fossan, J.R. Beene, T.K. Alexander,  
E.D. Earle, O. Hausser, A.B. McDonald  
Phys. Rev. C20, 960 (1979)
- 96) DECAYS OF THE LOWEST T=2 STATES IN A=4N NUCLEI FROM  $^8\text{Be}$  TO  $^{44}\text{Ti}$   
S.J. Freedman, C.A. Gagliardi, M.A. Oothoudt, A.V. Nero, R.G.H. Robertson, P.J. Zutavern,  
E.G. Adelberger, A.B. McDonald  
Phys. Rev. C19, 1907 (1979)
- 97) THE ALPHA WIDTH OF THE LOWEST T=2 STATE IN  $^{28}\text{Si}$   
P.G. Ikossi, K.A. Snover, J.L. Osborne, E.G. Adelberger, A.B. McDonald  
Nucl. Phys. A319, 109 (1979)
- 98) UPPER LIMITS FOR THE  $^1\text{H}(n, \text{GAMMA}, \text{GAMMA})^2\text{H}$  CROSS SECTION  
E.D. Earle, A.B. McDonald  
Proceedings of the Third International Symposium on Neutron Capture Gamma Ray  
Spectroscopy and Related Topics, Brookhaven National Laboratory, (September 18-22, 1978) p.  
243
- 99) ISOSPIN-FORBIDDEN PARTICLE DECAYS IN LIGHT NUCLEI (IV): TOTAL WIDTH OF  
THE LOWEST T=2 LEVEL OF  $^{24}\text{Mg}$   
A.B. McDonald, E.D. Earle, W. McLatchie, H.B. Mak, D.J. Martin, P.G. Ikossi  
Nucl. Phys. A305, 151 (1978)
- 100) MASS OF THE LOWEST T=2 STATE OF  $^{12}\text{C}$   
R.G.H. Robertson, T.L. Khoo, G.M. Crawley, A.B. McDonald,  
E.G. Adelberger, S.J. Freedman  
Phys. Rev. C17, 1535 (1978)

- 101) UPPER LIMIT ON PARITY MIXING IN  $^{21}\text{Ne}$   
K.A. Snover, R. von Lintig, E.G. Adelberger, H.E. Swanson, T.A. Trainor, A.B. McDonald, E.D. Earle, C.A. Barnes  
Phys. Rev. Lett. 41, 145 (1978)
- 102) ELECTROMAGNETIC PROPERTIES OF PARTICLE-VIBRATION COUPLING STATES IN  $^{209}\text{Bi}$   
J.R. Beene, O. Hausser, T.K. Alexander, A.B. McDonald  
Phys. Rev. C17, 1359 (1978)
- 103) A SCHEMATIC MODEL FOR ISOSPIN MIXING IN LIGHT NUCLEI  
A.B. McDonald, E.G. Adelberger  
Phys. Rev. Lett. 40, 1682 (1978)
- 104) DECAYS OF THE LOWEST  $T=2$  STATE IN  $^{44}\text{Ti}$   
S.J. Freedman, C.A. Gagliardi, M.A. Oothoudt, A.V. Nero, R.G.H. Robertson, F.J. Zutavern, E.G. Adelberger, A.B. McDonald  
Phys. Rev. C17, 2071 (1978)
- 105) KNIGHT SHIFTS AND ABSOLUTE MAGNETIC MOMENTS IN TRANS-BISMUTH NUCLEI  
O. Hausser, J.R. Beene, T. Faestermann, T.K. Alexander, D. Horn, A.B. McDonald, A.J. Ferguson  
Hyperfine Interactions 4, 219-223 (1978)
- 106) CORE-EXCITED HIGH SPIN ISOMERS IN  $^{212}\text{Rn}$   
D. Horn, O. Hausser, T. Faestermann, A.B. McDonald, T.K. Alexander, J.R. Beene, C.J. Herrlander  
Proceedings of International Conference on Nuclear Structure, Tokyo (1997)  
J. Phys. Soc. Japan 44 (1978) Suppl. P. 605-608
- 107) CORE-EXCITED HIGH SPIN ISOMERS IN  $^{212}\text{Rn}$   
D. Horn, O. Hausser, T. Faestermann, A.B. McDonald, T.K. Alexander, J.R. Beene, C.J. Herrlander  
Phys. Rev. Lett. 39, 389 (1977)
- 108) SEARCH FOR  $O^+$  LEVEL NEAR THE 8.87 MeV,  $2^-$  LEVEL OF  $^{16}\text{O}$   
A.B. McDonald, T.K. Alexander, J.R. Beene, J.C. Hardy, K.P. Jackson, H.B. Mak  
Nucl. Phys. A287, 189 (1977)
- 109) THE LOW SOLAR NEUTRINO FLUX: A SEARCH FOR A RESONANCE IN  $^6\text{Be}$   
A.B. McDonald, T.K. Alexander, J.R. Beene, H.B. Mak  
Nucl. Phys. A288, 389 (1977)
- 110) KNIGHT SHIFTS AND ABSOLUTE MAGNETIC MOMENTS OF  $(h/2)$  PROTON STATES IN TRANS-BISMUTH NUCLEI  
J.R. Beene, O. Hausser, A.B. McDonald, T.K. Alexander, A.J. Ferguson, B. Herskind  
Hyperfine Interactions 3, 397 (1977)

- 111) THICK TARGET NEUTRON YIELDS AND SPECTRAL DISTRIBUTIONS FROM THE (d,n) AND (p,n) REACTIONS ON  ${}^7\text{Li}$  AND  ${}^9\text{Be}$   
M.A. Lone, C.B. Bigham, J.S. Fraser, H.R. Schneider, T.K. Alexander, A.J. Ferguson, A.B. McDonald  
Nucl. Instr. & Meth. 143, 331 (1977)
- 112) ISOSPIN FORBIDDEN PARTICLE DECAYS IN LIGHT NUCLEI (III): DECAY WIDTHS OF THE LOWEST  $T=3/2$  LEVELS IN  ${}^{21}\text{Ne}$   
A.B. McDonald, H.B. Mak, H.C. Evans, G.T. Ewan, H.B. Trautvetter  
Nucl. Phys. A273, 477 (1977)
- 113) DOUBLY RADIATIVE THERMAL NEUTRON CAPTURE IN  ${}^2\text{H}$  AND  ${}^{16}\text{O}$ : EXPERIMENT AND THEORY  
A.B. McDonald, E.D. Earle, M.A. Lone, F.C. Khanna, H.C. Lee  
Nucl. Phys. A281, 325 (1977)
- 114) MEASUREMENTS OF ACCURATE  $g$ -FACTORS IN TRANSPARENT NUCLEI WITH HEAVY ION INDUCED REACTIONS  
O. Hausser, T.K. Alexander, J.R. Beene, E.D. Earle, A.B. McDonald, F.C. Khanna, I.S. Towner  
Hyperfine Interactions 2, 334 (1976)
- 115) ISOSPIN FORBIDDEN PARTICLE DECAYS IN LIGHT NUCLEI (II): WIDTHS OF  $T=3/2$  LEVELS IN  ${}^{17}\text{O}$   
A.B. McDonald, T.K. Alexander, O. Hausser  
Nucl. Phys. A273, 464 (1976)
- 116) ISOSPIN FORBIDDEN PARTICLE DECAYS IN LIGHT NUCLEI (I):  $T=3/2$  LEVELS IN  ${}^9\text{Be}$ ,  ${}^9\text{B}$   
A.B. McDonald, T.K. Alexander, O. Hausser, D.L. Disdier, E.G. Adelberger, H.B. Mak, A.P. Shukla, A.V. Nero  
Nucl. Phys. A273, 451 (1976)
- 117) MAGNETIC MOMENTS AND HALF-LIVES OF ISOMERIC STATES IN POLONIUM ISOTOPES  
O. Hausser, T.K. Alexander, J.R. Beene, E.D. Earle, A.B. McDonald, F.C. Khanna, I.S. Towner  
Nucl. Phys. A273, 253 (1976)
- 118) UPPER LIMIT FOR THE  $\text{H}(n,\gamma)\text{D}$  CROSS SECTION  
E.D. Earle, A.B. McDonald, M.A. Lone  
Phys. Rev. C14, 1298 (1976)
- 119) ISOMERIC YRAST STATES IN  ${}^{206}\text{Tl}$   
O. Hausser, J.R. Beene, T.K. Alexander, A.B. McDonald, T. Faestermann  
Phys. Rev. 64B, 273 (1976)
- 120) PRECISE MAGNETIC MOMENTS OF ( $\hbar/2$ ) PROTON STATES  
O. Hausser, J.R. Beene, A.B. McDonald, T.K. Alexander, E.D. Earle, F.C. Khanna, I.S. Towner, G.A. Beer, A. Olin  
Phys. Lett. 63B, 279 (1976)

- 121) APPLICATION OF THE DIRECT-SEMIDIRECT MODEL TO THE INTERPRETATION OF E1 AND E2 STRENGTH IN  $^{14}\text{C}(p,\gamma)^{15}\text{N}$   
K.A. Snover, J.E. Bussoletti, K. Ebisawa, T.A. Trainor, A.B. McDonald  
Phys. Rev. Lett. 37, 273 (1976)
- 122) LIFETIME OF THE 1.89 MeV  $2^+$  LEVEL OF  $^{18}\text{Ne}$ : TWO BODY CONTRIBUTION TO E2 TRANSITION RATES  
A.B. McDonald, T.K. Alexander, C. Broude, J.S. Forster, O. Hausser, F.C. Khanna, I.V. Mitchell  
Nucl. Phys. A258, 152 (1976)
- 123) RECOIL DISTANCE LIFETIME MEASUREMENTS OF LEVELS IN  $^{36}\text{Ar}$  AND  $^{36}\text{Cl}$   
G.J. Costa, T.K. Alexander, J.S. Forster, A.B. McDonald, I.S. Towner  
Nucl. Phys. A256, 277 (1976)
- 124) THE RADIATIVE DECAY OF THE SECOND EXCITED STATE OF  $^{12}\text{C}$   
H.B. Mak, H.C. Evans, G.T. Ewan, A.B. McDonald, T.K. Alexander  
Phys. Rev. C12, 1158 (1975)
- 125) SEARCH FOR TWO PHOTON DECAY IN THERMAL  $np$  CAPTURE  
E.D. Earle, A.B. McDonald, O. Hausser, M.A. Lone  
Phys. Rev. 35, 908 (1975)
- 126) THE MAGNETIC MOMENT OF THE  $8^+$  STATE IN  $^{212}\text{Rn}$   
W. Witthuhn, O. Hausser, D.B. Fossan, A.B. McDonald, A. Olin  
Nucl. Phys. A238, 141 (1975)
- 127) ISOSPIN FORBIDDEN PARTICLE DECAY WIDTHS OF THE LOWEST  $T=3/2$  LEVEL OF  $^{21}\text{Ne}$   
A.B. McDonald, H.B. Mak, H.C. Evans, G.T. Ewan, H.P. Trautvetter  
Proceedings of International Conference on Nuclear Structure and Spectroscopy, Amsterdam (1974) p. 225
- 128) THE CHALK RIVER MP TANDEM FACILITY: SPECIAL FEATURES AND OPERATING EXPERIENCES BEFORE AND AFTER UPGRADING  
H.R. Andrews, N. Burn, A.B. McDonald, J.C.D. Milton, J.P.D. O'Dacre  
Nucl. Instr. & Meth. 122, 147 (1974)
- 129) LIFETIMES OF LOW LYING LEVELS OF  $^{18}\text{O}$ ,  $^{18}\text{Ne}$   
A.B. McDonald, T.K. Alexander, O. Hausser, G.J. Costa, J.S. Forster, A. Olin  
Can. J. Phys. 52, 1381 (1974)
- 130) THE MAGNETIC MOMENT OF THE 97ps,  $J=3^-$  LEVEL IN  $^{14}\text{C}$   
T.K. Alexander, J.G. Costa, J.S. Forster, O. Hausser, A.B. McDonald  
Phys. Rev. C9, 1748 (1974)
- 131) USE OF THE  $^{14}\text{C}(^{18}\text{O}, ^{12}\text{Be})^{20}\text{Ne}$  REACTION TO MEASURE THE MASS OF  $^{12}\text{Be}$   
G.C. Ball, J.G. Costa, W.G. Davies, J.S. Forster, J.C. Hardy, A.B. McDonald  
Phys. Lett. 49, 33 (1974)
- 132) ALPHA DECAY WIDTHS IN  $^{20}\text{Ne}$   
O. Hausser, T.K. Alexander, D.L. Disdier, A.J. Ferguson, A.B. McDonald, I.S. Towner

- Nucl. Phys. A216, 617 (1973)
- 133) E1 POLARIZATION IN COULOMB EXCITATION OF  ${}^7\text{Li}$   
O. Hausser, A.B. McDonald, T.K. Alexander, A.J. Ferguson, R.E. Warner  
Nucl. Phys. A212, 618 (1973)
- 134) MEASUREMENT OF THE RELATIVISTIC DOPPLER EFFECT USING 8.6 MeV  
CAPTURE GAMMA RAYS  
A. Olin, T.K. Alexander, O. Hausser, A.B. McDonald, G.T. Ewan  
Phys. Rev. D8, 1633 (1973)
- 135) THE MASS EXCESS AND LOW LYING LEVEL STRUCTURE OF  ${}^{14}\text{B}$   
G.C. Ball, G.J. Costa, W.G. Davies, J.S. Forster, J.C. Hardy, A.B. McDonald  
Phys. Rev. Lett 31, 395 (1973)
- 136) SHORTLIVED ALPHA EMITTERS OF THORIUM:  ${}^{218-220}\text{Th}$   
O. Hausser, W. Witthuhn, T.K. Alexander, A.B. McDonald, J.C. Milton, A. Olin  
Phys. Rev. Lett. 31, 323 (1973)
- 137) ISOSPIN FORBIDDEN PARTICLE DECAY OF T=3/2 LEVELS IN MIRROR  
NUCLEI  
E.G. Adelberger, A.B. McDonald, C.L. Cocke, C.H. Davids, A.P. Skukla, H.B. Mak, D. Ashery  
Phys. Rev. C7, 889 (1973)
- 138) THE LIFETIMES OF THE  $3/2^+$  975 keV LEVEL IN  ${}^{25}\text{Mg}$  AND THE  $3/2^+$  945 keV  
LEVEL IN  ${}^{25}\text{Al}$   
T.K. Alexander, O. Hausser, A.B. McDonald, G.T. Ewan  
Can. J. Phys. 50, 2198 (1972)
- 139) HIGH SPIN STATES IN  ${}^{20}\text{Ne}$  FROM  ${}^{16}\text{O}(\alpha,\alpha)$  SCATTERING  
O. Hausser, A.J. Ferguson, A.B. McDonald, I.M. Szoghy, T.K. Alexander, D.L. Disdier  
Nucl. Phys. A179,465 (1972)
- 140) A MEASUREMENT OF THE RADIATIVE WIDTH OF THE  $8^+$  11.948 MeV LEVEL  
OF  ${}^{20}\text{Ne}$   
T.K. Alexander, O. Hausser, A.B. McDonald, A.J.Ferguson  
Nucl. Phys. A179, 477 (1972)
- 141) NUCLEAR POLARIZABILITY OF  ${}^7\text{Li}$  FROM COULOMB EXCITATION  
O. Hausser, A.B. McDonald, T.K. Alexander, A.J. Ferguson, R.E. Warner  
Phys. Lett. 38B, 75 (1972)
- 142) COULOMB REORIENTATION OF  $2^+$  STATES IN  ${}^{32}\text{S}$  AND  ${}^{112}\text{Cd}$   
O. Hausser, T.K. Alexander, A.B. McDonald, W.T. Diamond  
Nucl. Phys. A178, 593 (1971)
- 143) LIFETIMES OF STATES IN  ${}^{29}\text{Si}$ ,  ${}^{27}\text{Al}$  AND  ${}^{24}\text{Mg}$   
A.B. McDonald, T.K. Alexander, O. Hausser, G.T. Ewan  
Can. J. Phys. 49, 593 (1971)

- 144) THE ELASTIC SCATTERING OF  $^{28}\text{Si}$  BY  $^{28}\text{Si}$   
A.J. Ferguson, O. Hausser, A.B. McDonald, T.K. Alexander  
Proceedings of Symposium on Heavy Ion Scattering, Argonne, Illinois ANL 7837, 187 (1971)
- 145) GAMMA DECAY PROPERTIES OF  $^{20}\text{Ne}$  LEVELS BELOW 12 MeV  
O. Hausser, T.K. Alexander, A.B. McDonald, G.T. Ewan, A.E. Litherland  
Nucl. Phys. A168, 17 (1971)
- 146) ISOSPIN NONCONSERVING PARTICLE DECAYS OF THE LOWEST T=3/2  
LEVELS IN  $^{17}\text{F}$  AND  $^{17}\text{O}$   
A.B. McDonald, E.G. Adelberger, H.B. Mak, D. Ashery, A.P. Shukla, C.L. Cocke, C.N. Davids  
Phys. Lett. 31B, 119 (1970)
- 147) A STUDY OF  $^{22}\text{Mg}$  BY THE  $^{20}\text{Ne}(^3\text{He},n)$  REACTION  
A.B. McDonald, E.G. Adelberger  
Nucl. Phys. A144, 593 (1970)
- 148) A STUDY OF THE  $^{16}\text{O}(^3\text{He},n)$  AND  $^{12}\text{C}(^3\text{He},n)$  STRIPPING REACTIONS AND A  
COMPARISON OF ANALOGOUS  $(^3\text{He},n)$ ,  $(^3\text{He},p)$  AND  $(t,p)$  TRANSITIONS  
E.G. Adelberger, A.B. McDonald  
Nucl. Phys. A145, 497 (1970)
- 149) LOW LYING T=2 STATES OF  $^{16}\text{O}$   
E.G. Adelberger, A.V. Nero and A.B. McDonald  
Nucl. Phys. A143, 97 (1970)
- 150) LOWEST T=2 STATES IN  $^{20}\text{Ne}$  AND  $^{24}\text{Mg}$   
E.G. Adelberger, A.B. McDonald  
Phys. Lett. 24B, 270 (1970)
- 151) T=3/2 LEVELS IN  $^{21}\text{Na}$   
A.B. McDonald, E.G. Adelberger  
Phys. Lett. 26B, 380 (1970)
- 152) ISOSPIN NONCONSERVING DECAYS IN MIRROR NUCLEI  
E.G. Adelberger, C.L. Cocke, C.N. Davids, A.B. McDonald  
Phys. Rev. Lett. 22, 352 (1969)
- 153) T=3/2 STATES IN  $^{21}\text{Na}$  AS SEEN IN THE  $^{20}\text{Ne}(p,p)^{20}\text{Ne}$  REACTION  
A.B. McDonald, J.R. Patterson, H. Winkler  
Nucl. Phys. A137, 545 (1969)
- 154) A STUDY OF LOW-LYING T=3/2 AND T=2 STATES IN SOME LIGHT NUCLEI  
E.G. Adelberger, A.B. McDonald, C.A. Barnes  
Nucl. Phys. A124, 49 (1969)
- 155) TEMPERATURE DEPENDENCE OF POSITRON MEAN LIVES IN METALS  
I.K. MacKenzie, T.L. Khoo, A.B. McDonald, B.T.A. McKee  
Phys. Rev. Lett. 19, 946 (1967)
- 156) A LOWER LIMIT ON THE MASS OF  $^5\text{Be}$

E.G. Adelberger, A.B. McDonald, T.A. Tombrello, F.S. Dietrich, A.V. Nero  
Phys. Rev. Lett. 19, 946 (1967)

157) THE NUCLEAR MASSES OF  ${}^9\text{C}$  AND THE CORRESPONDING ANALOGUE  
STATE OF  ${}^9\text{B}$ .

C.A. Barnes, E.G. Adelberger, D.C. Hensley, A.B. McDonald  
Proceedings of the Gatlinberg Conference of 1966, p. 261.