

**CURRICULUM VITAE  
ARTHUR B. McDONALD**

**Contact**

**Office**

Sudbury Neutrino Observatory Institute  
Dept of Physics, Queen's University  
Kingston, Ontario, Canada  
K7L 3N6  
Tel: (613) 533-2702  
Fax: (613) 533-6813

**Home**

830 Sandringham Place  
Kingston, Ontario  
K7P 1N2  
Tel: (613) 389-9593  
Cell: (613) 541-1405

**Academic Experience**

<b>Position</b>	<b>Institution</b>	<b>Year</b>
Director	Sudbury Neutrino Observatory	1989 - Present
Gordon and Patricia Gray Chair in Particle Astrophysics	Queen's University	2006 - Present
University Research Chair	Queen's University	2002 - 2006
Professor	Queen's University	1989 - Present
Professor	Princeton	1982 - 1989
Sr. Research Officer	Atomic Energy of Canada (Chalk River, Ontario)	1980 - 1982
Assoc. Research Officer	Chalk River	1975 - 1980
Assist. Research Officer	Chalk River	1970 - 1975
Postdoctoral Fellow	Chalk River	1969 - 1970

**Education:**

Dalhousie University, Halifax, Nova Scotia - B.Sc. Physics (1964)  
Dalhousie University, Halifax, Nova Scotia - M.Sc. Physics (1965)  
California Institute of Technology, Pasadena, CA, USA - Ph.D. Physics (1969)

**Awards:**

Governor General's Gold Medal, Dalhousie, 1964  
Rutherford Memorial Fellowship, (1969-1970)  
Fellow of the American Physical Society, 1983  
LL.D., *honoris causa*, Dalhousie, 1997  
Fellow of Royal Society of Canada, 1997  
Killam Research Fellowship, 1998  
LL.D., *honoris causa*, University College of Cape Breton, 1999  
D. Sc., *honoris causa*, Royal Military College, 2001  
T.W. Bonner Prize in Nuclear Physics from the American Physical Society, 2003  
Canadian Association of Physicists Medal for Lifetime Achievement in Physics, 2003  
Natural Sciences and Engineering Research Council of Canada Award of Excellence, 2003  
Gerhard Herzberg Canada Gold Medal for Science and Engineering, 2003

UK-Canada Rutherford Lecturer for the Royal Society, 2003  
Welsh Lecturer at the University of Toronto, 2004  
Basterfield Lecturer at the University of Regina, 2004  
Sigma Xi Fund of Canada Award for Scientific Achievement, 2004  
Bruno Pontecorvo Prize in Particle Physics, JINR, Dubna, 2005  
Manne Siegbahn Lecturer at Stockholm University, 2005  
E.W. Guptill Lecturer, Dalhousie University, 2005  
Helmut Baer Lecturer, University of Michigan, 2006  
D. Sc., *honoris causa*, University of Chicago, 2006  
NSERC John C. Polanyi Award to the SNO team, 2006  
Officer of the Order of Canada, 2007  
Co-recipient, Benjamin Franklin Medal in Physics, 2007

**Present Memberships:**

2000 - Present: CIAR Cosmology and Gravity Program (Chair Advisory Board, 2000-05)  
2003 - Present: Certified member of Professional Engineers of Ontario  
Ongoing Continuing service on Advisory Committees for International Conferences in Neutrino and Particle Physics and as a referee for international journals and funding agencies

**Past Committee Memberships:**

1976 - 1979: Natural Sciences and Engineering Research Council (NSERC) of Canada, Subatomic Physics Grant Selection Committee  
1978 - 1980: Canadian Association of Physicists Council  
1986 - 1988: Nuclear Science Advisory Committee (NSAC) to U.S. Department of Energy and National Science Foundation  
1986 - 1988: TRIUMF Experiment Evaluation Committee  
1983 - 1985: NSAC Instrumentation Subcommittee  
1985 - 1988: NSAC Nuclear Theory Subcommittee  
1990 - 1993: U.S. Institute for Nuclear Theory Advisory Board  
1992 - 1995: Lawrence Berkeley Laboratory, Nuclear Physics Division Review Committee  
1992: Canadian Institute for Advanced Research (CIAR) Superconductivity Review Committee  
1996: Canadian Institute for Advanced Research (CIAR) Cosmology Review Committee  
1998 - 2002: Queen's University representative on TRIUMF Board of Management  
2000 Conference Chairman, XIX International Conference on Neutrino Physics and Astrophysics, Sudbury, Ontario  
2002 KATRIN Experiment International Review Committee, Karlsruhe, Germany  
2003 Member of Advisory Committee for Selection of Project Manager for Thirty Meter Telescope Project (Caltech)  
2004 Member of Review Committee for the Faculty of Arts and Science of the University of Toronto

1997 - 2004: IUPAP Committee on Particle and Nuclear Astrophysics and Gravitation  
2005 Member of Neutrino Science Advisory Group for US National Science  
Foundation and US Department of Energy  
1997 - 2006: Canadian Institute for Advanced Research (CIAR) Research Council  
1997 - 2006: IUPAP Commission on Astrophysics (Secretary)  
2002 - 2006: IUPAP Commission on Particle Physics (Assoc. member)  
2003 - 2006: IUPAP Commission on Nuclear Physics (Assoc. Member)

**Visiting Positions:**

CERN, Geneva (2004), University of Hawaii (2004), Oxford University (2003)  
University of Washington, Seattle (1978)  
Los Alamos National Laboratory (1981)  
Queen's University (1988)

**Personal**

Birthdate: August 29, 1943, Citizenship: Canadian  
Married (four children, five grandchildren)