

**CURRICULUM VITAE
ARTHUR B. McDONALD**

Contact

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Academic Experience

Position	Institution	Year
Professor Emeritus	Queen's University	2013 - Present
Director	Sudbury Neutrino Observatory	1989 - Present
Gordon and Patricia Gray Chair in Particle Astrophysics	Queen's University	2006 - 2013
University Research Chair	Queen's University	2002 - 2006
Director	SNO Institute	1991-2003, 2006 - 2009
Associate Director	SNOLAB Institute	2009 - 2013
Professor	Queen's University	1989 - 2013
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
Honorary Life Membership at Science North, Sudbury, Ontario, 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 at Dalhousie University, 2005
 Helmut Baer Lecturer at 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, 2006
 Co-recipient, Benjamin Franklin Medal in Physics, 2007
 Donald R. Hamilton Lecturer at Princeton University, 2008
 Huggins Science Lecturer at Acadia University, 2008
 LL.D., *honoris causa*, Saint Francis Xavier University, 2009
 Fellow of the Royal Society of the UK and the Commonwealth, 2009
 Member of Canadian Science and Engineering Hall of Fame, 2009
 Killam Prize in the Natural Sciences, 2010
 Member of the Nova Scotia Discovery Centre Hall of Fame, 2010
 E. Segre Lecture, Berkeley, 2010
 D. Sc., *honoris causa*, University of Alberta, 2011
 Guelph Waterloo Physics Institute Distinguished Lecturer, 2011
 Henry Marshall Tory Medal, Royal Society of Canada, 2011
 D. Sc., *honoris causa*, University of Waterloo, 2012
 Order of Ontario, 2012
 European Physics Society HEP Division Giuseppe and Vanna Cocconi Prize, 2013

Present Memberships:

1964 - Present: Member of Canadian Association of Physicists
 1969 - Present: Member of American Physical Society (Fellow 1983-present)
 1998 - Present: Fellow of the Royal Society of Canada
 2004 - Present: Member of the Professional Engineers of Ontario
 2000 - Present: CIAR Cosmology and Gravity Program Associate (Chair of the Advisory Board, 2000-05)
 Ongoing Continuing service on Advisory Committees for International Conferences in Neutrino and Particle Physics and as a referee for international journals and funding agencies
 2009 – Present Fellow of the Royal Society of the UK and the Commonwealth
 2009 - 2015 Member of the Princeton University Physics Department Advisory Council
 2011- Present Member of the Board of Directors of the Perimeter Institute, Waterloo

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)
- 2009: Member of Review Committee for Helmholtz Association program in Particle Astrophysics, Germany
- 2009 - 2010 Member of the Scientific Advisory Committee for the INFN-LNGS Gran Sasso Underground Laboratory
- 2010 - 2012 Member of the Scientific Advisory Board, Max-Planck-Institut für Kernphysik, Heidelberg
- 2011-2013 Member of the External Advisory Board for the Kavli Institute for Cosmological Physics and NSF Physics Frontier Center at the University of Chicago

Visiting Positions:

CERN, Geneva (2004), University of Hawaii (2004, 2009), Affiliate Graduate Faculty, University of Hawaii (2010-), Oxford University (2003, 2009), University of

Washington, Seattle (1978), Los Alamos National Laboratory (1981), Queen's University (1988)

Personal

Birthdate: August 29, 1943, Citizenship: Canadian

Married (four children, eight grandchildren)