

**Joel FELDMAN**  
**Department of Mathematics**  
**University of British Columbia**

<b>Education</b>	B. Sc.	University of Toronto	1970
	A.M.	Harvard University	1971
	Ph.D.	Harvard University	1974
<b>Employment</b>	Research fellow	Harvard University	1974-75
<b>Record</b>	Moore Instructor	Massachusetts Institute of Technology	1975-77
	Asst. Professor	University of British Columbia	1977-1982
	Assoc. Professor	University of British Columbia	1982-1987
	Full Professor	University of British Columbia	1987-present

**Selected academic awards and distinctions**

Woodrow Wilson Fellowship  
 UBC Killam Research Prize, 1989/90/91  
 Fellow of the Royal Society of Canada, 1990–  
 John L. Synge Award, Royal Society of Canada, 1996  
 Aisenstadt Chair Lectureship, CRM, 1999/2000  
 Jeffery–Williams Prize, Canadian Mathematical Society, 2004  
 Faculty of Science Achievement Award for Teaching, 2003/04  
 CRM–Fields–PIMS Prize, 2007  
 CAP–CRM Prize in Theoretical and Mathematical Physics, 2007  
 UBC Killam Teaching Prize, 2006/07  
 Fields Institute Fellow, 2007–  
 Jacob Biely Faculty Research Prize, UBC, 2014

**Selected professional service and experience**

Organizer, Semester on Mathematical Quantum Field Theory, Sept. 1- Dec. 15 1987,  
 CRM Université de Montréal.  
 Member, Advisory Committee, 1988 IAMP Congress, Swansea, Wales.  
 Nachdiplom lecturer, ETH Zürich, 1991-92  
 Chairman, organizing committee, CMS Annual Seminar, “Mathematical Quantum Theory”, Vancouver,  
 August 4-14, 1993.  
 Member, International Advisory Committee, CRM-CAP Summer School, “Particles and Fields ’94”,  
 Banff, Canada.  
 Associate editor, Reviews in Mathematical Physics, 1989-  
 Associate editor, Canadian Journal of Mathematics, 1995-1999  
 Associate editor, Canadian Mathematical Bulletin, 1995-1999  
 Associate editor, Mathematical Physics EJ, 1994-  
 Editor, CRM Series in Mathematical Physics, 1996-  
 Associate editor, Comptes rendus Mathématiques de l’Académie des Sciences / Mathematical reports  
 of the Academy of Science  
 Editor, Annales Henri Poincaré, 1999-  
 Member, Grant Selection Committee in Mathematics, Natural Sciences and Engineering Research  
 Council, 1996-98  
 Member, Scientific Advisory Panel, Fields Institute, 1996-2000  
 Member, CRM–CAP Prize jury 2001–2003, 2011–2014  
 Chair, CRM–CAP Prize jury, 2002-2003  
 Member, Fields Institute Editorial Board, 2004-2006  
 Editor, Journal of Mathematical Physics, 2005-2010  
 Core Member, Section 11 (Mathematical Physics) selection panel for ICM 2014

## Selected Invited Lectures

- International School of Mathematical Physics, Erice, Sicily, 1975.  
Les Houches XLIII: Critical Phenomena , Random Sytems, Gauge Theories, Les Houches, France, 1984.  
Principal speaker, Summer Meeting of the CMS, St. John's Nfld, 1986.  
26<sup>th</sup> Internationale Universitätswochen für Kernphysik, Schladming, Austria, 1987.  
IAMP Congress, Swansea, Wales, 1988.  
International Congress of Mathematicians, Kyoto, Japan, 1990.  
“Mathematische Aspekte der Quantentheorie großer Systeme”, Oberwohlfach, Germany,  
June 19-25, 1994  
Plenary speaker, 50<sup>th</sup> anniversary meeting of the CMS, Toronto, Ontario, June 4-8, 1995  
Plenary speaker, XIIth International Congress on Mathematical Physics, Brisbane, Australia, July 1997.  
Aisenstadt Chair Lectureship, CRM, 1999-2000.  
Plenary speaker, Second Pacific Rim Conference on Mathematics, Taipei, Taiwan, January 2001.  
Konrad–Fest Symposium, Zürich, June 2002.  
Meeting “Renormalization Group”, Oberwohlfach, Germany, June 9-15, 2002.  
Invited speaker, XIVth International Congress on Mathematical Physics, Lisbon, Portugal, July 2003.  
Jeffery–Williams Prize Lecture, Halifax, June, 2004.  
CRM–Fields–PIMS Prize Lectures, Toronto, April, 2007, Montreal, October 2007, Vancouver,  
November, 2007.  
Invited speaker, Analysis and Stochastics in Quantum Many-Body Systems, MPI, Leipzig,  
May 17-19, 2007  
CAP-CRM Prize Lecture, 2007 Canadian Association of Physicists Congress, Saskatoon, June 2007.  
Invited session speaker, 2007 Canadian Association of Physicists Congress, Saskatoon, June 2007.  
CAP-CRM Prize Lecture, Montreal, October 2007.  
Andrejewski Lectureship, Universität Leipzig, June 2008.  
Constructive and Multiscale Methods in Quantum Theory, Universitaet Heidelberg, July, 2009.  
Invited minicourse speaker, Quantum Theory from Small to Large Scales, Ecole de Physique des  
Houches, Les Houches, France, August 2-27, 2010.

## Selected Publications

- J. Feldman, K. Osterwalder, The Wightman Axioms and the Mass Gap for Weakly Coupled  $(\phi^4)_3$  Quantum Field Theories, *Ann. Physics* **97** (1976), 80-135.  
J. Feldman, A. Cooper and L. Rosen, Legendre Transforms and r-Particle Irreducibility in Quantum Field Theory: The Formalism for  $r=1,2$ , *Ann. Phys. (N.Y.)* **137** (1981), 146-209.  
J. Feldman, J. Magnen, V. Rivasseau and R. Sénéor, Bounds on Renormalized Feynman Graphs, *Commun. Math. Phys.* **100** (1985), 23-55.  
J. Feldman, J. Magnen, V. Rivasseau and R. Sénéor, A Renormalizable Field Theory: The Massive Gross-Neveu Model in Two Dimensions, *Commun. Math. Phys.* **103** (1986), 67-103.  
J. Feldman, J. Magnen, V. Rivasseau and R. Sénéor, Infrared  $\Phi_4^4$ , in *Critical Phenomena, random systems, gauge theories, Les Houches XLIII* eds. K. Osterwalder and R. Stora, North Holland (1986), 505-537.  
J. Feldman, T. Hurd, L. Rosen and J. Wright, QED: A Proof of Renormalizability, *Springer Lecture Notes in Physics* **312** (1988), 176 pages.  
J. Feldman, H. Knörrer and E. Trubowitz, The Perturbatively Stable Spectrum of a Periodic Schrödinger Operator, *Invent. math.* **100** (1990) 259-300.

J. Feldman and E. Trubowitz, Perturbation Theory for Many Fermion Systems, *Helvetica Physica Acta* **63** (1990) 156-260.

J. Feldman, H. Knörrer and E. Trubowitz, Perturbatively Unstable Eigenvalues of a Periodic Schrödinger Operator, *Commentarii Mathematici Helvetici*, **66** (1991) 557-579.

J. Feldman and E. Trubowitz, The Flow of an Electron-Phonon System to the Superconducting State, *Helvetica Physica Acta*, **64** (1991) 214-357.

Most of my publications since 1992 are available at <http://www.math.ubc.ca/~feldman/>