

## **Ian Affleck**

AM, Ph.D. (Harvard), B.Sc. (Trent University, Canada)

### **Employment History**

2003- Killam University Professor, University of British Columbia

2001-2003 – Professor, Boston University

1987-2001 – Fellow, Canadian Institute for Advanced Research and Professor,  
University of British Columbia

1981-1987- Assistant Professor, Princeton University

1979-1981 – Junior Fellow, Harvard Society of Fellows

### **Ten most significant relevant publications for past 5 years (Total over past 5 years: 35 plus 2 submitted)**

1. Ingersent, K., Ludwig, A.W.W. and Affleck, I., “Kondo screening in a magnetically frustrated nanostructure: Exact results on a stable, non-Fermi-liquid phase”, Phys. Rev. Lett, submitted, 2005.
2. Hofstetter, W., Affleck, I., Nelson, D.R. and Schollwoeck, U. “Non-Hermitian Luttinger Liquids and Vortex Physics”, Europhys. Lett. 66, 178-184 (2004).
3. Chamon, C., Oshikawa, M. and Affleck, I. “Junctions of three quantum wires and the dissipative Hofstadter model”, Phys. Rev. Lett 91, 206403 (4 pages) (2003).
4. Castro Neto, A. H., Novais, E., Borda, L., Zarand, G. and Affleck, I. “Quantum Magnetic Impurities in Magnetically Ordered Systems”, Phys. Rev. Lett 91, 096401 (4 pages) (2003).
5. Simon, P. and Affleck, I., “Finite Size Effects in Conductance Measurements on Quantum dots” Phys. Rev. Lett., 89, 206602 (4 pages) (2002).
6. Eggert, S., Affleck, I. and Horton, M.D.P., “Neel Order in Doped Quasi One Dimensional Antiferromagnets”, Phys. Rev. Lett., 89, 047202 (4pages) (2002).
7. White, S.R., Affleck I. and Scalapino, D.J., “Friedel Oscillations and Charge Density Waves in Chains and Ladders”, Phys. Rev. B65, 165122 (13 pages) 2002.
8. Oshikawa, M. and Affleck, I. “Electron Spin Resonance in  $S=1/2$  Antiferromagnetic Chains”, Phys. Rev. B65, 134410 (28 pages) (2002).
9. Affleck, I. and Simon, P., "Detecting the Kondo Screening Cloud Around a Quantum Dot", Phys. Rev. Lett., 86, 2854-2857 (2001).
10. Lou, J., Qin, S., Ng, T.-K., Su, Z. and Affleck, I., “Finite Size Spectrum, Magnon Interactions and Magnetization of  $S=1$  Spin Chains”, Phys. Rev. B62, 3786-3794 (2000).

### **Competitive Grant Funding for the last 5 years**

1. “Strongly correlated electrons”, \$85,000 (CAD) per annum, 2004-2008, \$75,000 per annum, 2000-2004, Natural Sciences and Engineering Research Council of Canada, Principal Investigator: I. Affleck.
2. “Topics in Superconductivity, nano-electronics and quantum magnetism”, \$90,000 (US) per annum, 2002-2004, U.S. National Science Foundation, Principal Investigator: I. Affleck