RESEARCH ASSOCIATE (LIMITED TERM) In Mathematical Physics Department of Physics, University of Toronto

Applications are invited for a 12 month position as Research Associate to work in the research group of Professor D.J. Rowe. This research group is engaged primarily in the application of algebraic techniques to the solution of problems in many-body quantum mechanics and nuclear structure physics with an emphasis on the construction of analytically or computationally solvable models. The group is small but interacts strongly with a group in mathematics with parallel interests. A planned new development is to build models for valuing and managing financial risk embedded in life insurance products and common fixed income and equity derivative products.

In addition to participating in the activities of the above research group, the successful candidate will be expected to take a lead role in developing, and supporting large-scale Monte Carlo simulation models in a high-performance computing environment, according to the needs of our sponsor.

Applicants for this position should have a PhD in mathematics or physics, be experienced in Lie algebra and group theory and have post-graduate experience in modeling and computer programming in C, C++ and Maple in a Linux environment. A facility with stochastic calculus, invariant theory, and nuclear physics would also be an asset. Particularly important is the ability to write and communicate effectively with a wide range of audiences.

Applicants should forward a resume of their experience and relevant abilities, together with a CV, and a letter of reference [plus names (and email addresses) of two additional potential referees who may be contacted] by mail, email or fax to:

Ms. Helen Iyer: Department of Physics, University of Toronto, Toronto, ON M5S 1A7 Email: <u>iver@physics.utoronto.ca</u>

Fax: 416-978-2537

Important: Each communication should clearly indicate at the top that it is an application for the Research Associate position in Mathematical Physics.

Applications and letter of support should be received by September 19, 2008. The appointment will commence at a mutually convenient date after October 31, 2008.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.