## **Atlantic Canada General Relativity Regional Meeting**

May 5th-7th, 2006, UNB

## Report

The Atlantic Canada General Relativity Regional Meetings (ACGRRM) are annual miniconferences aimed at encouraging collaboration and exchange of ideas amongst general relativity groups in the atlantic region. They are held at a university in the atlantic region, with a plenary talk by a expert in the field followed by shorter duration talks by participants.

This year, the ACGRRM, 2006 was held at University of New Brunswick, with the plenary lecture by Professor Kristin Schleich of University of British Columbia. Her talk about 'Topology of well behaved dimensionally reduced spacetimes' can be found at the conference website. The other talks were given by participants some of whom were invited. They are, 'Randall-Sundrum and Kalb-Ramond Field: Return of the hierarchy problem?' by Prof. S. Das (University of Lethbridge); "How to compute Dirac observables in general relativity' by Dr. B. Dittrich (Perimeter Institute), 'Phantom Cosmologies' by J. Latta (Dalhousie University); 'Fluid observers and tilting cosmologies' by Dr. W. C. Lim (Dalhousie University); 'Geometric flows and string theory' by Dr. S. Vardarajan (University of New Brunswick); 'Averaging problem in cosmology and macroscopic gravity' by Dr. R. Zalaletdinov (St. Francis Xavier University). The conference had 16 registered participants of which 8 were faculty, 3 post doctoral fellows and 5 students. The talk slides can be found at the url: <a href="http://www.unb.ca/fredericton/science/math/atgr06.html">http://www.unb.ca/fredericton/science/math/atgr06.html</a>.

The highlights of the conference were two intense discussion sessions focussed at recent results in discrete methods of path-integral quantisation of gravity, and the resolution of the conformal mode paradox of quantum gravity. The conference was funded by AARMS and the Department of Mathematics and Statistics, University of New Brunswick.