## Atlantic Association for Research in Mathematical Sciences (AARMS) Memorial University of Newfoundland (MUN) ATLANTIC ALGEBRA CENTRE (AAC)

## "Combinatorial Theory of Groups and Hopf Algebras" Mini-conference in the framework of Science Atlantic Meeting 2012 October 14, 2009 Sackville, NB, Canada

## Report

The mini conference was organized as AARMS session of Science Atlantic 2012 Mathematics, Statistics, and Computer Science Conference at Mount Allison University. The mini conference was attended by 3 participants from the US, 1 from New Zealand and 12 from Atlantic Canada. The plenary talks were given by three leading specialists in Combinatorial Theory of Groups and its applications, as follows:

ALEXANDER OLSHANSKII (Vanderbilt University, USA): "Bi-Lipschitz embeddings of groups"

OLGA KHARLAMPOVICH (City University of New York, USA): "Group actions on trees"

ALEXEI MIASNIKOV (Stevens Institute, USA): "Definable sets in free and hyperbolic groups"

Two extended research talks were given by MUN professors as follows:

**EDUARDO MARTINEZ-PEDROZA** (Memorial University: "Coherence and Negative Sectional Curvature in Complexes of Groups"

MIKHAIL KOTCHETOV (Memorial University): "Applications of Hopf algebras to the study of gradings"

In addition there were three short research talks based on the results of the work of graduate and undergraduate students.

The organizers of the conference were the members of Atlantic Algebra Centre: Yuri Bahturin, Mikhail Kotchetov and Hamid Usefi, with the help of MUN Honours student Jonathan Lomond. We all enjoyed the hospitality and the help of Dr Andrew Irwin, Head of the Department of Mathematics and Statistics of Mount Allison University, who provided us with coffee and lunch breaks.

The financial support was provided from the budget of AARMS in the amount of \$2,500. The total expenses were \$3,034 so the remainder of \$534 was covered by AAC. The total amount consists of the sum of the travel expenses of invited speakers (\$2,250), the partial support of the travel of two MUN graduate students (\$600) and the cost of the car rentals for transporting the speakers and the students from Halifax, NS, to Sackville, NB (\$184). In addition, some of the students who also participated in other activities of Science Atlantic meeting were supported by the Department of Mathematics and Statistics of Memorial University (these amounts are not included in the above calculation).