# Atlantic Association for Research in the Mathematical Sciences Memorial University of Newfoundland Atlantic Algebra Centre

Mini course and Colloquium by István Heckenberger Philipps-Universität Marburg

## Report

During the week from March 14 to March 18, the AARMS-AAC-mini course "Nichols algebras" took place at the St. John's campus of Memorial University. Professor István Heckenberger from the University of Marburg in Germany gave a total of six lectures in the mini course and an additional colloquium on the related topic of Fomin-Kirillov algebras. Professor Heckenberger is one of the world-leading experts in the subject whose contributions have shaped the field. His introduction of Weyl groupoids as a generalization of Weyl groups into the theory is certainly one of the most important developments in Lie theory in the last decades. Professor Heckenberger is also one of the coauthors of a major research monograph on Nichols algebras that is currently being written.

Professor Heckenberger lectured on braided vector spaces, their Nichols algebras, the Weyl groupoid associated to a Nichols algebra, the use of this Weyl groupoid for the decomposition and classification of Nichols algebras, and the relation to deformed enveloping algebras, where the Weyl groupoid reduces to the Weyl group. Fifteen people participated in the mini course, ranging from undergraduate students to faculty members. We had three external guests, a student from the University of New Hampshire and a student as well as a faculty member from Saint Mary's University in Halifax. The lectures were well-received by the people in the audience, who experienced an intense and stimulating week of mathematics in a nonetheless relaxed atmosphere.

# Breakdown of Expenses and Revenues

## 1. Expenses

- a. Airfare for speaker: \$ 1219.67
- b. Accommodation for speaker: \$892.71
- c. Per diem for speaker: \$ 255.00
- d. Support for student from Halifax: \$ 602.45
- e. Support for student from New Hampshire: \$ 503.38

Total Expenses: \$ 3473.21

#### 2. Revenues

a. AARMS: \$ 2500.00

b. AAC: 973.21

Total Revenues: 3473.21