International Workshop
Enveloping Algebras and Representation Theory
August 28 – September 1, 2014
Memorial University of Newfoundland
St John's, Newfoundland and Labrador

First Announcement

Universal enveloping algebras of Lie algebras appeared more than a century ago as one of the major tools in Lie Theory. They find many applications in Differential Geometry and Mathematical Physics, and are indispensable to many directions of research in representation theory of Lie groups and algebras. With the increasing interest in infinite-dimensional representations, the role of enveloping algebras becomes even more significant. More recently, universal enveloping algebras have appeared in the theory of nonassociative algebras other than Lie (alternative, Jordan, Malcev and their super analogs), which are of growing importance in the most advanced areas of mathematics and physics where traditional approaches fail to work. In addition, the Hopf algebra structure of universal enveloping algebras lends itself to quantization, leading to the celebrated Drinfeld-Jimbo "quantum groups". Far-going generalizations of the latter have recently appeared in the theory of Hopf Algebras in connection with the classification of pointed Hopf algebras. Thus, Enveloping Algebras is a vibrant area of research, with many mathematicians around the globe working and hundreds of papers published.

The aim of this workshop is to discuss the current state of research in the area of Enveloping Algebras and their applications, primarily in Representation Theory. We have invited several prominent mathematicians to give lectures illuminating the main achievements in these areas and outline the prospects of further research. There will be a number of longer research talks as well as some shorter research communications, in particular by graduate students and postdoctoral fellows.

We expect about 40 participants in total; almost a half of them will be graduate students and postdoctoral fellows, primarily associated with AAC and NOLT, but also from other universities in Canada and abroad. We will make lecture notes available to anyone interested on AAC web site http://www.mun.ca/aac/ and will consider the possibility of publishing proceedings of the workshop in a mathematical journal, as we did for some of the previous workshops held by AAC.

The current workshop is the first to be organized jointly by AAC (Yuri Bahturin, Margaret Beattie and Mikhail Kochetov) and NOLT (Yuly Billig and Kirill Zaynullin). The list of confirmed invited speakers includes

1. Alberto Elduque (Univeristy of Zaragoza, Spain)
2. Vyacheslav Futorny (University of Sao Paulo, Brazil)
3. Victor Kac (Massachusetts Institute of Technology, USA)
4. Antony Joseph (Weizmann Institute, Israel)

5. Vladimir Mazorchuk (University of Uppsala, Sweden)
6. José María Pérez Izquierdo (University of La Rioja, Spain)
7. Alexander Premet (University of Manchester, UK)
8. Ivan Shestakov (Unversity of Sao Paulo, Brazil)
9. Sudarshan Sehgal (University of Alberta)

One of the days of the workshop will be assigned to informal discussions and a whale/puffin watching tour.

If you wish to attend, please write at aac@mun.ca with topic EART2014. Please provide your name, affiliation, the topic of your talk(s), if you wish or if you are invited to speak. The deadline for registration is July 1, 2014.

A support for the accommodation expenses in St. John's could be available to the students doing research in the entitled areas of the workshop. If you want to be considered for this support, please attach a letter from your supervisor.

The details of transportation, accommodation, etc. will be provided in the second announcement, which will follow shortly.