Algebra Seminar

**Yorck Sommerhäuser,
Memorial University of Newfoundland**

**Wednesday, November 25, 2015
HH-3017, 1:00p.m.**

Introduction to Nichols Algebras II

Abstract:

In the previous talk, we explained what braided vector spaces are and discussed their tensor algebras. In this talk, we will define their tensor coalgebras and introduce a canonical map from the tensor algebra to the tensor coalgebra. The Nichols algebra, which generalizes symmetric and exterior algebras, is the image of this map, because, as we will explain, this image consists of suitably symmetrized tensors. This approach to Nichols algebras is due to M. Rosso and P. Schauenburg. Time permitting, we will outline other approaches to Nichols algebras and discuss their role in the classification program for pointed Hopf algebras.