## **Algebra Seminar**

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Wednesday, November 18, 2015 HH-3017, 1:00p.m.

Introduction to Nichols Algebras

## Abstract:

With every Yetter-Drinfel'd module, one can associate its Nichols algebra in the same way as one associates with a vector space its exterior algebra. The Nichols algebra of a Yetter-Drinfel'd module is a Yetter-Drinfel'd Hopf algebra and therefore gives rise to an ordinary Hopf algebra via the Radford biproduct construction. Because of this connection, Nichols algebras play an essential role in the classification program for pointed Hopf algebras. In the talk, we will give an introduction to the basics of Nichols algebras, starting from the analogy with the exterior algebra.