## ALGEBRA SEMINAR

## Drinfeld associators, the Grothendieck-Teichmueller group and multiple zeta values (Part 4)

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ABSTRACT: Drinfeld associators and the Grothendieck-Teichmueller group show up in quantum algebras, the theory of motives and low dimensional topology. In this mini-course, I will introduce Drinfeld associators, the Knizhnik-Zamolodchikov equation and the Grothendieck-Teichmueller group GRT. I will prove the existence of a Drinfeld associator and show that GRT acts simply transitively on the set of Drinfeld associators. I will show that GRT is an infinite dimensional group and discuss its Lie algebra. If time will permit, I will also talk about multiple zeta values.

Monday, April 30, 2012 1:40 – 2:30 pm Room 617, Wachman Hall Department of Mathematics