

# ALGEBRA SEMINAR

## *Drinfeld associators, the Grothendieck-Teichmueller group and multiple zeta values (Part 3)*

Vasily Dolgushev  
Temple University

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 23, 2012  
1:40 – 2:30 PM  
ROOM 617, WACHMAN HALL  
DEPARTMENT OF MATHEMATICS