

# UNIVERSITY OF NORTH TEXAS MATHEMATICS UNDERGRADUATE COLLOQUIUM

**Tuesday,  
Nov 5, 2013  
4:00 - 5:00 PM**

**General  
Academic  
Building,  
Room 105**

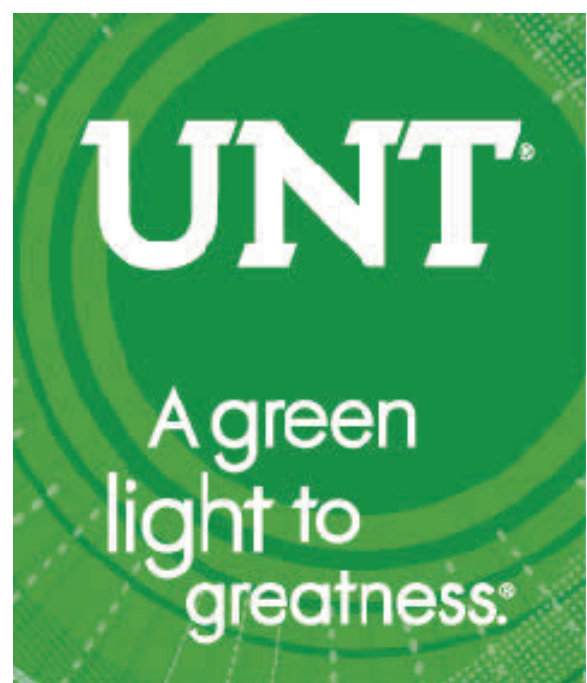
A pre-lecture reception with cookies, coffee and tea will be held at 3:30 PM in the General Academic Building, Room 472.

The colloquium is sponsored by UNT Department of Mathematics and the *RTG in Logic & Dynamics*, a research training group supported by the National Science Foundation and the University of North Texas.

Department of Mathematics  
University of North Texas  
1155 Union Circle #311430  
Denton, TX 76203  
(940) 565-2155

rtg@unt.edu  
www.math.unt.edu/rtg

UNT campus parking  
information can be found at:  
<http://www.unt.edu/transit/>



## Christian Rosendal

University of Illinois at Chicago



## Geometric Group Theory

**Geometric group theory is a relatively new way of looking at infinite groups as geometric objects. For example, the additive group of integers  $\mathbb{Z}$  is naturally represented as a bi-infinite line. But to which extent is that something that is inherent in the group structure and not just something we impose since we know the integers so well?**

**Dr. Rosendal will present some tools that will allow us to see a canonical geometrical structure in infinite groups.**

*Christian Rosendal is an Associate Professor of Mathematics at the University of Illinois at Chicago. He studied Philosophy and Mathematics at the University of Copenhagen and the University of Oslo. He earned his Master's and Ph.D. degrees from the University of Paris 6 and 7. Dr. Rosendal's research interests are Descriptive set theory and the applications in and connections with Functional Analysis, Ergodic theory, Topological groups and Model theory.*