



Department of Mathematics and Statistics

COLLOQUIUM

Tuesday, January 21, 2014

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Alexander Invariants of Knots, Links, and Groups

Abstract: This will be an introductory lecture on the Alexander polynomial and its generalizations. I'll give the geometric definition of Alexander polynomial of a knot, and demonstrate the geometric calculation via Seifert surfaces. I'll discuss Conway's normalization, the relation with tangles, and the skein relations. Finally, I'll show the generalizations to links and other groups, such as arrangement groups, and the relation to characteristic varieties.

4:00 – 5:00 pm

Adel Math Bldg, Room 164

(refreshments at 3:45)

ACGT Seminar:

Tuesday, January 21, 11:20 – 12:25 pm, AMB 164. Speaker: Brooke Fox (NAU grad student),
Title: Conjugacy classes of cyclically fully commutative elements of Coxeter groups

Applied Math Seminar (AMS)

Thursday, January 23, 12:45 – 2:00 pm, AMB 221

Speaker: Jim Swift

Title: Ridder's Method

Abstract: Ridder's Method is a root-finding technique that is guaranteed to converge (like bisection method) but which is much faster than the Bisection Method.

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS):

Friday, January 24, 3:00 – 4:00 pm, AMB 164

Speaker: TBA, Title TBA, Faculty Guest: TBA.