http://www.depts.ttu.edu/registrar/animated.gifTexas Tech University

Mathematics and Statistics

**Seminars & Colloquium**

**October 11-15**

**Colloquium:**

No Colloquium this week

**Monday – October 11**

Student Holiday

**Tuesday – October 12**

Student Holiday.

**Wednesday – October 13**

**Analysis Seminar**

Time: 4:00-5:00pm

Room: MATH 109

Speaker: Alex Solynin

Title: Conformal Invariance of Brownian Motion

**Applied Math Seminar**

Location: MATH 014

Time: 4:00-5:00pm

Speaker: Victoria E. Howle

Title: Block Preconditioning for Incompressible Fluid Flow Problems

**Thursday – October 14**

**Friday – October 15**

**Algebra Seminar**

Time: 3:00–4:00 pm

Room: MATH 016

Speaker: Lars Winther Christensen

Topic: "Vanishing of Tate homology and depth of tensor products"

To infer properties of a tensor product M \otimes N from properties the factors M and N is

a delicate task. Auslander's depth formula for pairs of Tor-independent modules over a regular local ring, depth(M \otimes N) = depth(M) + depth(N) - depth(R), has been generalized in several directions over a span of decades. In the talk I will describe a formula that holds for every pair of Tate Tor-independent modules over a Gorenstein local ring. It subsumes the previous generalizations of Auslander's formula.