

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

# COLLOQUIUM

Friday, October 11  
2:00 – 3:00 PM  
Maria Sanford, Room 101

**CURVES, SURFACES AND THREE-MANIFOLDS**

**ROGER VOGELER**

**CENTRAL CONNECTICUT STATE UNIVERSITY**

**Abstract:** Much of the theory of three-dimensional manifolds involves lower dimensional objects, that is, curves and surfaces. I'll explain and illustrate some of these objects, including Dehn twists, foliations, pseudo-Anosov surface mappings, and surface bundles over the circle. Then I'll show how these ideas are used in proving the following result:

**Theorem:** There is no upper bound on the number of cusps in a finite-volume hyperbolic three-manifold whose isometry group induces a two-transitive action on the cusp set.

***For further information:***

[gotchevi@ccsu.edu](mailto:gotchevi@ccsu.edu) 860-832-2839

<http://www.math.ccsu.edu/gotchev/colloquium/>