CCSU

DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, April 21
3:00 – 4:00 PM
Maria Sanford, Room 101

DO ALL SURFACES HAVE A SHORT BASIS?

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Abstract: How to classify surfaces? In this talk we will start by introducing the basis ideas of Algebraic Topology. How we can use group invariants to explore topological properties of spaces. Our focus will be on surfaces. Then we will see how to construct the fundamental group of a surface. We will continue our journey by looking into homology of a surface. Then we will talk about length of curve on the surfaces and ask can you find a short basis for the homology group?

At the end we will see few examples that we construct in a join work with Peter Buser, and Bjoern Muetzel that shows that there are surfaces with no minimal basis to their homology group.

To join us online use the following link: https://ccsu.webex.com/meet/gotchev
For further information: gotchevi@ccsu.edu; 860-832-2839;
http://mathcolloquium.sites.ccsu.edu/