

CCSU

DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, April 10

2:00 – 3:00 PM

Maria Sanford, Room 101

SIMPLEX PARTITIONING OF POLYHEDRA

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Abstract: It is a well-known fact that every polygon on n -vertices can be partitioned into $n-2$ non overlapping triangles. This process is called triangulations and has been used in many theoretical and applied solutions. However the analogue of this process in 3-dimensions is much more complex and many of the simple results we find in 2-Dimensions are no longer true for higher dimensions. We will discuss the ambiguity of partitioning polyhedra into simplices and the complexity of this process while discovering new shapes for which the analogue of triangulation in 3-Dimensions doesn't exist. Some 3D models made on a 3D printer will be used to demonstrate the process.

For further information:

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