CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, April 23 2:00 – 3:00 PM Maria Sanford, Room 101

AN APPLICATION OF THURSTON'S CLASSIFICATION OF 2-ORBIFOLDS

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ABSTRACT

Spheres and tori are examples of closed 2-dimensional surfaces. A natural question is how many possible types of 2-dimensional surfaces are there, and how do you describe them? We will discuss the answer to this question: the well-known classification theorem for closed surfaces. Much more recently, William Thurston has generalized this theorem to closed 2-dimensional orbifolds. We will give a brief introduction to orbifolds and describe how this classification works. At the end, we'll give an example of how Thurston's classification has been used recently to prove a finiteness result about orbifolds.

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