Department of Mathematics and Statistics Colloquium

Algebra and Origami

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Abstract: In the making of origami, one starts with a piece of paper, and through a series of folds along seed points one constructs complicated three-dimensional shapes. Mathematically, one can think of the complex numbers as representing the piece of paper, and the seed points and folds as a way to generate a subset of the complex numbers. Under certain constraints, this construction can give rise to a ring (a set that allows both addition and multiplication), which we call an origami ring. We will talk about the basic construction of an origami ring and further extensions and implications of these ideas in algebra and number theory. This is joint work with undergraduate Juergen Kritschgau.

Monday, September 26 at 3:45 in Roop 103

refreshments at 3:30