BI-CO MATHEMATICS COLLOQUIUM

Catherine Searle

Wichita State University

"Curvature, Symmetries and Topology"

Wednesday, April 15, 2015

Talk at 6:30 p.m. – Park 336

The talk will be preceded by a panel conversation and pizza dinner with Math majors at 6:00 p.m. in Park 328.

Abstract:
A longstanding and difficult problem in Riemannian Geometry is the classification of manifolds of positive and non-negative sectional curvature. One approach to this problem has been via the introduction of symmetry, where one studies the interaction of curvature, topology and isometric group actions. I will begin by giving a brief history and discuss the current state of the problem with a focus on isometric torus actions, including many illustrative examples. I will conclude with a discussion of recent joint work with Christine Escher.

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