SI-CO MATHEMATICS COLLOQUIUM

Constance Leidy University of Pennsylvania

"Knots and the Fourth Dimension"

Monday, January 29, 2007

Talk at 4:15 – Park 328
Tea at 3:45 – Park 355, Math Lounge

Abstract:

A knot that bounds a smooth disc in the 4-dimensional ball is called a slice knot. The set of all knots modulo slice knots can be given a group structure under the operation of connected sum. This group is known as the smooth knot concordance group. I will discuss some recent results of T. Cochran, S. Harvey, and myself that show that knots in a certain family whose slice status was previously unknown are in fact not slice.

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