

TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

Paul Melvin

Bryn Mawr College

will speak on

Asteroids, Triple Linking, and Bicycles

ABSTRACT: The linking number of a pair of closed curves in space can be expressed as the degree of a map from the torus to the sphere, by means of the linking integral Gauss wrote down in 1833. In the early 1950's, John Milnor introduced a family of higher order linking numbers. In this talk I will describe a formula for Milnor's triple linking number as the "degree" of a map from the 3-dimensional torus to the sphere; asteroids and bicycles will come into play along the way. This is joint work with DeTurck, Gluck, Komendarczyk, Shonkwiler and Vela-Vick.

MONDAY, 3 OCTOBER 2011

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3:30-5:00 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS