Temple University Mathematics Colloquium

Richard Schwartz

University of Maryland

will speak on

Irrational triangular billiards

The triangular billiards problem, which goes back to the 18th century, asks if every triangle has a periodic billiard path. The answer is known to be yes for acute, right, and rational triangles (as I will explain in my talk). Here "rational" means that the angles are rational multiples of Pi. In my talk I will demonstrate my computer program McBilliards (written jointly with Pat Hooper) which explores the triangular billiards problem. I will describe some discoveries we have made using McBilliards, as well as the techniques by which we can sometimes convert the discoveries into mathematical proofs.

FRIDAY, APRIL 29, 2005 LECTURE AT 2:00 PM (\$) COFFEE AND REFRESHMENTS FROM 1:30 - 4 PM. ROOM 617, WACHMAN BUILDING DEPARTMENT OF MATHEMATICS