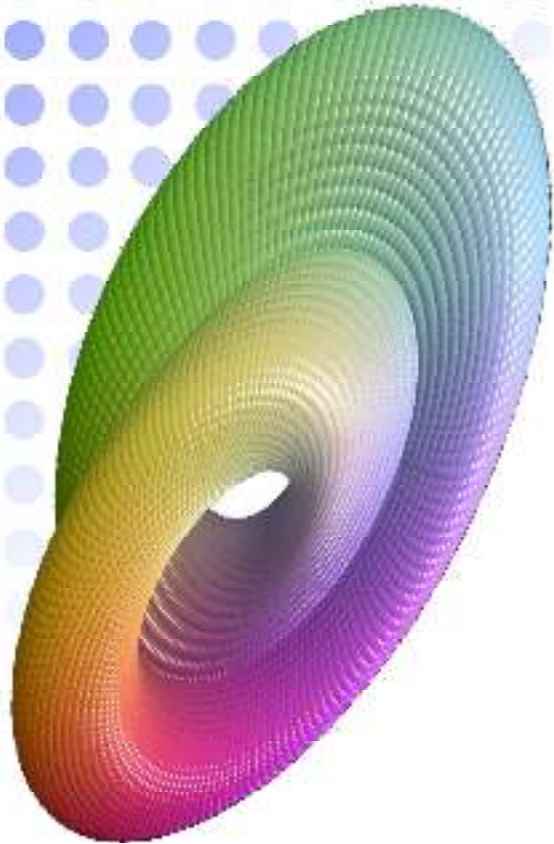


Michigan Math Club

Thursday at 4pm in the Commons
Free Pizza and Pop



Fermat's Christmas Theorem

Prof. Stephen DeBacker

Abstract

Fermat's Christmas Theorem (25 December, 1640) is the incredibly beautiful statement that an odd prime may be written as the sum of two squares if and only if it is one more than a multiple of four. As with his famous last theorem, Fermat stated, but did not prove, this theorem. Many of the greats (e.g., Euler, Gauss, Dedekind) produced proofs of the Christmas Theorem. In this talk, we will discuss an approach to the problem via that most elementary of all number-theoretic concepts: the Euclidean Algorithm.

