

Date: May 8th, 2009

Speaker: Michael Amato, UNC Asheville

Title: *Morley's Miracle*

Abstract: In the year 1898 Frank Morley, professor of mathematics at Johns Hopkins University, made a discovery that has captured the attention of mathematicians for over a century. The reason for this astonishment was not because of the complexity of the discovery, but due to its simplicity, elegance, and for the fact that it had not been discovered before.

This geometrical discovery is now known as the Morley Trisector Theorem. The history of Frank Morley and of his theorem and its various proofs will be discussed in this talk. We will explore the theorem through the use of Geometer's Sketchpad, a software tool used to understand geometry in a dynamic manner. Finally, we will investigate two different proofs of Morley's Trisector Theorem, one by Neville Reed and another by D.J. Newman.