

## ***APPLICATIONS OF PURE MATHEMATICS***

This first presentation is for a **GENERAL AUDIENCE**



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**Abstract:** Many mathematicians pursue their art out of curiosity, not because they have some predetermined application in mind. That does not necessarily mean that they are not interested in applications to “real world” problems – it is just not their primary motivation. In this talk, intended for a campus-wide audience of students and faculty, I will discuss a research topic in my field of mathematics, topology, that has, to my surprise, been found to have applications outside mathematics.

**Biographical Sketch:** Professor Ingram came to Missouri S&T (then UMR) from the University of Houston in 1989 as Professor and chair of the Department of Mathematics and Statistics. He served as chair until 1998 and continued as professor until his retirement in December 2002. He spent the following year as visiting professor at Baylor University. Since then he has remained very mathematically active, publishing numerous research articles and two Springer texts. Much of his work since retiring concerns generalized inverse limit spaces with set valued bonding functions that he, together with William S. Mahavier, introduced in 2006. This new area of topology has generated a great deal of interest with hundreds of articles published since its introduction. The Ingram Lecture Series is possible because of a generous donation by Tom to the Missouri S&T Mathematics and Statistics Department upon his retirement from S&T.