Happy Numbers

What: **Bi-State Colloquium**
When: **Tuesday, November 6, 4:45pm**
Where: **Loras College, Hennessy 250**
Who: **Marnie Ferguson**

What makes a number happy? The happy function takes each digit of a positive integer, squares it, and sums the squares. If repeated applications of the happy function results in one, then the number is said to be a happy number. In this talk, we'll discuss some of the basic properties of the happy function and resulting happy numbers. Further, this presentation discusses our search for patterns present in the paths of happy numbers and in which integers are happy.

Marnie Ferguson is a senior mathematics with secondary education major at Loras. This presentation is in partial fulfillment of the Loras College mathematics major.