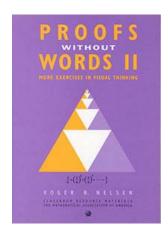
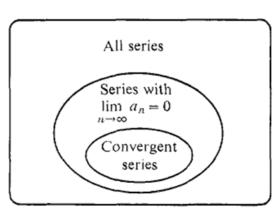
## Department of Mathematics

## Fall 2015 Colloquium Series







## Let's Get Series About Calculus!

Dr. Jeffrey Haag,
Professor of Mathematics
Humboldt State University
Thursday, September 3, 2015
Behavioral and Social Sciences Building Room 166, 4 p.m.

Infinite series are a topic studied in second-semester calculus. Many students find the topic difficult. But if we understand simple things deeply we might see that series provide the simplest approach to analyze deep properties of numbers and functions.

This talk will center on the Basel Problem, first posed in 1644 and first solved in 1734. The problem is to determine the sum 1 + 1/4 + 1/9 + 1/16 + ..., that is, the sum of the reciprocals of the squares of the positive integers.

Developing background to study the Basel Problem will take us back 2300 years to ideas of Archimedes. Natural questions about Basel-like problems will lead to active mathematical research of today.

Only the basics of Calculus I will be assumed. We will see familiar ideas in a new way. It's time to Get Series About Calculus.

Jeffrey Haag is Professor and Chair of the Mathematics and Computer Science Departments at Humboldt State University.

We invite you to the Pre-colloquium Tea on the third floor of the BSS building at 3:30 on Thursday.