



PI Math Club
is pleased to present a talk by

Dr. Gerard Venema

Calvin College

and Associate Secretary of the Mathematical Association of America



The title of his talk is

“Dimension Theory for Undergraduates”

In this talk he will explore the concept of dimension and how our intuitive understanding of dimension relates to various rigorous mathematical definitions. Undergraduates encounter a definition of dimension in a course on linear algebra and in third semester calculus. It is natural to assume that those definitions will generalize in a straightforward way. But the discovery in the early twentieth century of some surprising examples showed that dimension is more elusive than that and forced a reexamination of the whole concept of dimension. Several competing definitions of dimension emerged from that process. We will review those competing definitions from an elementary point of view and look at lots of examples. Among the examples studied will be numerous “fractals,” which are spaces whose dimension has different values depending on which definition of dimension is being used.

Friday, April 8

at noon

in KT 216

Free pizza and pop following the talk!

Open to all interested students.