

The Department of Mathematics at the  
University of North Carolina at Asheville  
Presents the 2016 Parsons Lecture  
Dr. Bob Devaney

Chaos Games  
and Fractal Images

Thursday, March 31 at 7 p.m. in  
Lipinsky Auditorium  
<http://maps.unca.edu>

Free and open to the public



Abstract

In this lecture we will describe some of the beautiful images that arise from the "Chaos Game." We will show how the simple steps of this game produce, when iterated millions of times, the intricate images known as fractals. We will describe some of the applications of this technique used in data compression as well as in Hollywood. We will also challenge students present to "Beat the Professor" at the chaos game and maybe win his computer.

A native of Methuen, Massachusetts, Robert L. Devaney is currently Professor of Mathematics at Boston University. He received his undergraduate degree from the College of the Holy Cross in 1969 and his PhD from the University of California at Berkeley in 1973 under the direction of Stephen Smale. He taught at Northwestern University and Tufts University before coming to Boston University in 1980.

His main area of research is dynamical systems, primarily complex analytic dynamics, but also including more general ideas about chaotic dynamical systems. He has authored (co-authored) several books on dynamical systems and chaos that have become popular classroom texts, has published over 100 research articles, and has been an invited speaker on the international scene. Since 1989 Bob Devaney has been the director of the NSF's Dynamical Systems and Technology Project, helping high school and college educators bring modern mathematics into the classroom."

The Parsons Lecture  
Celebrating exceptional teaching at UNC Asheville  
past, present, and future.  
<http://math.unca.edu/parsons-lecture>

