### Clarkson University

#### Mathematics REU Speaker Series

Summer 2022

## Thursday July 14, 2022 @ 11 am in SC 356

Attend the talk via zoom: https://clarkson.zoom.us/j/98680644309

# Ordered Chaos: An Introduction to Chaos Theory in Continuous and Discrete Dynamical Systems

A system that is chaotic is often described as being in a state of complete disorganization/disarray. However, mathematical chaos is a bit more complicated. Although systems displaying mathematical chaos appear unordered there is actually a large degree of order present. Drawing examples from various fields we will underscore the concepts, and showcase the ubiquity, of "ordered chaos."



Associate professor, St. Lawrence University, Canton

#### Dan Look, Ph. D.

Dr. Look received his PhD from Boston University in 2005 working in Complex Dynamics. He has taught at St. Lawrence University since 2009 and is very passionate about his pedagogy. He is currently working on a few research projects in the fields of Complex Dynamics, Text Mining, and Popular Culture. In Complex Dynamics he is looking at the dynamics of perturbed complex polynomials as well as a map derived from a form of multiple circle inversion in the complex plane. Outside of Complex Dynamics, he has done research involving text mining and stylometry (a mathematical/statistical study of linguistic style) as well as the representation of mathematics in comic books and other pop culture media.



The Mathematics REU seminar series is weekly that has been supported by National Security Agency and National Science Foundation.

Please contact: Guangming Yao (gyao@clarkson.edu) or James Greene (jgreene@clarkson.edu) for more information.