Student Research Talks (StReeTs)

George Mason University

Entropy on Character Varieties

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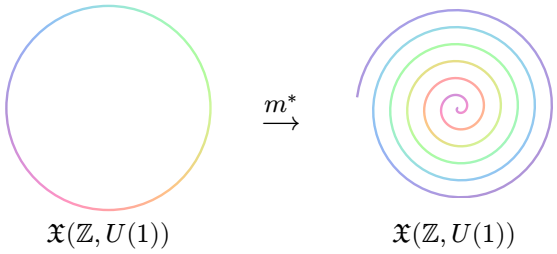

Abstract

Entropy is a measure of complexity in dynamical systems across various mathematical contexts. Character Varieties are objects born from invariant theory in the intersection of topology and algebraic geometry. This talk will introduce the concept of topological entropy, algebraic entropy, and word entropy, define character varieties, and finally discuss the entropy of induced word maps on them. We will conclude with a generalized inequality about algebraic and word entropy in this case, and conjecture results for future work. This talk is the result of an undergraduate Honors Thesis.

Date: Friday, March 22*nd*
Time: 2:30pm–3:20pm
Place: Exploratory Hall 4106

Pizza will be served at the presentation.

For further information or for special accommodations (including dietary restrictions), please contact Michael Merkle or Gabe Lumpkin via email at `mmerkle@gmu.edu or glumpkin@gmu.edu` by Thursday.