

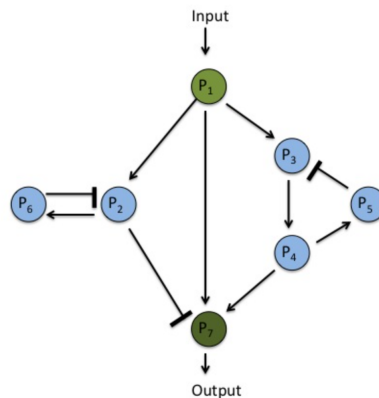
Student Research Talks (StReeTs)

Mason Experimental Geometry Lab (MEGL)

An Introduction to Robust Perfect Adaptation Networks

Tracey Oellerich

Department of Mathematics Sciences
George Mason University



Abstract

Robust perfect adaptation (RPA) is the ability of a system to return to a set activity level following changes in the environment. This type of behavior can be seen in complex biological networks, such as signal transduction, gene regulation, and protein interaction networks. The question remains as to how these networks manage to adapt to change. The goal is to identify factors that could indicate that a node in a system will exhibit RPA. These factors can then later be used to create a system of equations for different models that will exhibit RPA. This talk will provide an introduction to RPA and the associated network structures.

Date: Friday, March 1, 2019

Time: 2:30pm–3:20pm

Place: Exploratory Hall 4106

Pizza and soda will be served at the presentation.

For further information or for special accommodations, please contact Sean Lawton via email at seanlawton@gmail.com or drop by the MEGL.