Matthew Johnston

SJSU

Steady State Parametrizations
for Biochemical Reaction Systems

March 07, 2018, MH320

Abstract: Recent results in chemical reaction network theory have focused on structural conditions which guarantee the steady state set of a (bio)chemical reaction system possesses a monomial parametrization. Monomial parametrizations are well-studied due to their close link to the capacity for multistationarity. In this talk, we generalize this structural framework to derive conditions for a rational steady state parametrization.

Background: One course in differential equations.

About the speaker: Matthew D. Johnston received his Ph.D. in Applied Mathematics from the University of Waterloo in 2011. He spent three years as postdoc at the University of Wisconsin-Madison before joining the faculty at SJSU in the fall of 2015.

Snacks in MH331B at 2:30 pm
Talk starts at 3:00 pm

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/