
Balloons in chemical reaction networks

Hiroshi Matano*¹

¹University of Tokyo (UTokyo) – Graduate School of Mathematical Sciences, University of Tokyo, 3-8-1
Komaba, Tokyo 153-8914, Japan

Abstract

This talk is concerned with sensitivity analysis of chemical reaction networks. More precisely, we focus on monomolecular networks in equilibrium states and establish a simple criterion for determining regions of influence when any one of the reaction rates is perturbed through sensitivity experiments of enzyme knock-out type. Our argument is largely based on a recent work of Fiedler and Mochizuki, and it gives a certain interpretation of their results.

*Speaker