

Philipp Getto

BCAM BASQUE CENTER FOR APPLIED MATHEMATICS

e-mail: phgetto@yahoo.com

A differential equation with state-dependent delay from cell population dynamics

The aim of this research is an analysis of the maturation process of stem cell populations. The regulation of this process leads to a description of the population dynamics as a differential equation with state-dependent delay, i.e., an object of great mathematical challenge. We show for this system well-posedness and give some results on the existence of equilibria.