LyapXool

Carlos Argáez¹,

LyapXool is a C++ program to compute complete Lyapunov functions and their orbital derivatives for any two- or three-dimensional dynamical system expressed by an autonomous ordinary differential equation. The program is user-friendly and determines the chain-recurrent set. This paper describes how the code is organized, how it can be used and provides an interesting example of its application.

 $^{^{1}}$ Faculty of Physical Sciences, University of Iceland