

# Open Loop Control of Lyapunov Exponents in Fixed Points of Nonlinear Oscillator

Nayyer Iqbal

School of Mathematical Sciences,

Government College University,

68-B, New Muslim Town, Lahore Pakistan

[nayyersms3@gmail.com](mailto:nayyersms3@gmail.com)

We investigate the Lyapunov exponents in the fixed points of one dimensional nonlinear oscillation driven by rapidly changing external force. We present phase portraits of the systems in the neighbourhood of the fixed points and demonstrate the changing of the Lyapunov spectrum under the application of different forms of feed forward control.