

1146-35-141

Laszlo P. Kindrat* (laszlokindrat@gmail.com) and **Marianna A. Shubov**. *Spectral results on the Euler-Bernoulli beam with linear boundary feedback.*

This talk is focused on asymptotic and spectral analysis of the Euler-Bernoulli beam subject to fully non-dissipative boundary conditions. The beam is clamped at the left end and equipped with a 4-parameter linear boundary control at the right end. Asymptotic approximations of the spectrum of the dynamics generator are presented for different cases of parameter values. Results on the existence of deadbeat modes for particular control parameter values are discussed and demonstrated via numerical studies. (Received January 17, 2019)