Contribution ID: **71**   Type: **not specified**

Numerical damping of oscillations of beams by using multiple point actuators

Monday, 3 July 2017 15:30 (15 minutes)

The beams are typical elements of complex mechanical systems. Vibrations of beams are modeled by initial boundary problems for the forth order partial differential equation, where initial conditions are considered as non-desirable perturbations and right parts of the equation as a control function. In this report we investigate the possibility of numerical damping non-desirable vibrations for minimal time t = T by using multiple point actuators. Given examples for numerical solutions obtained with one and multiple point actuators showing process of damping oscillations of a beam.

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Session Classification: Mathematical methods and application software for modeling complex systems and engineering (I)