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Title of Talk: Stabilization of the Beam Equation

Abstract:

We start with a beam equation with boundary control, and a continuous time feedback that exponentially stabilizes the beam. We consider a sample-and-hold version of the feedback, with sampling time τ . We consider the following question: Does the sample-and-hold version also stabilize the beam if $\tau > 0$ is small enough? We show that if there is some damping in the beam, the answer is yes.