

An LQR approach to tracking control for parabolic systems

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We present a linear-quadratic regulator design for tracking reference states of parabolic systems. It is shown that the solution strategy is closely related to an earlier approach where the LQR approach was used to achieve asymptotic zero stabilization. That means, here we want to regulate the state to a given stationary state. We discuss theoretical extensions to the earlier approach needed to complete this task and compare numerical results for both approaches.

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