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*Zero dynamics interior point control for a viscous Burgers equation.*

In this talk the authors show how a zero dynamics design methodology, which has been developed in a series of works for boundary controlled of distributed parameter systems, can be extended to include interior point control for tracking problem and disturbance rejection problems for a one dimensional Burgers' equation. In particular we demonstrate how simple control laws can be obtained for solving MIMO set-point control problems using co-located interior point control and actuation. In this short talk we present two examples. In the first example we consider a problem with two interior controls. The tracking problem consists of a set-point control at one interior point while tracking a sinusoid at another interior point. In our second example we consider a multivariable set-point control problem. (Received August 28, 2005)