Stabilization of the Kuramoto-Sivashinsky equation with a delayed boundary control

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In this talk we will discuss about the stabilization of the Kuramoto-Sivashinsky equation, which is a nonlinear fourth-order parabolic equation. We will show how to use the Artstein transform, the pole-shifting theorem and Halanay inequality to exponential stabilize the equation with a boundary control possessing a positive constant delay in its argument.