



Null controllability for a parabolic-elliptic coupled system

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In this paper, we prove the null controllability of some parabolic-elliptic systems. The control is distributed, locally supported in space and appears only in one PDE. The arguments rely on fixed-point reformulation and suitable Carleman estimates for the solutions to the adjoint system. Under appropriate assumptions, we also prove that the solution can be obtained as the asymptotic limit of some similar parabolic systems.

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