Blow-up Solutions For a Thin-Film Equation With Strong Damping And Nonlocal Source Terms

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Abstract

In this note, we consider a modified thin-film equation including a strong damping term together with a non-local source term. The problem is considered under the periodic boundary conditions and a finite time blow-up result is established for the case of positive initial energy. Also a lower bound estimate for the blow-up time is obtained.

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