G. A. Philippin and V. Proytcheva, Some remarks on the asymptotic behaviour of the solutions of a class of parabolic problems, *Math. Meth. Appl. Sci.*, 29 (2006), 297–307.

Abstract

This paper deals with a class of semilinear parabolic problems. We establish sufficient conditions on the data forcing the solution to blow up at finite time tau and derive an upper bound for tau. Moreover, we show that if the problem is modifies in some way, the solution decays exponentially in time and depends continuously on the data.