Danilov, V. G.; **Maslov, V. P.**
Asymptotics of reaction-diffusion equations. (Russian) Zbl 0695.35101
Mat. Zametki 44, No. 1, 152-153 (1988).

Consider the Cauchy problem for the reaction-diffusion equation

$$\epsilon\partial u/\partial t - \epsilon^2(\partial/\partial x)(\lambda(x,t)\partial u/\partial x) - \gamma(x,t)F(u) = 0,$$

$$u = u(x,t,\epsilon)_{t=0} = \psi(x/\epsilon, x), \quad \lambda, \gamma \geq \delta > 0, \quad \lambda, \gamma f \in C^\infty.$$

The existence of asymptotics of solution of this problem is proved.

Reviewer: J.H.Tian

MSC:

35K57 Reaction-diffusion equations
35B40 Asymptotic behavior of solutions to PDEs

Keywords:

Cauchy problem; asymptotics