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Abstracts of Short Communications and Posters

Section:

10. Partial Differential Equations

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Nanbu, Tokumori, Toyama Medical and Pharmaceutical University, Japan

On solutions of some nonlinear degenerate parabolic equations

We consider the large time behaviour of solutions of the initial-boundary value problem for some nonlinear degenearte parabolic equations $@u_t = \Delta_x(A(u)) + b \cdot \nabla(B(u)) - q(x,t)C(u)$ where $u = u(x,t)$ is a scalar function of the spatial variable $x \in \Omega$ and time $t > 0$, $b \in R^N(b \neq O)$ and Ω is an open regular domain in R^N. Here the functions $A(u), B(u), C(u)$ satisfy $A(0) = A^{'}(0) = 0, A^{'}(u) > 0 \quad (u \neq 0)$, $B(0) = B^{'}(0) = 0$, $C(0) = C^{'}(0) = 0$ and some suitable conditions.