

Well-posed p -laplacian problems with large diffusion

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Abstract. In this work we study the asymptotic behavior of p -laplacian parabolic problems of the form

$$u_t - D\Delta_p u + |u|^{p-2}u = B(u)$$

in a bounded smooth domain in \mathbb{R}^n and Neumann boundary conditions when the diffusion coefficient D becomes large. We prove, under suitable assumptions, that the family of attractors behaves lower and upper semicontinuously as the diffusion increases to infinity.

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