

# Asymptotic behavior of nondissipative scalar reaction-diffusion equations

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We consider a class of nondissipative reaction-diffusion equations with global existence and solutions blowing-up in infinite time. These are known as slowly nondissipative equations. The existence of unbounded solutions requires the introduction of some objects at infinity interpreted as equilibria at infinity. Also, it is well known that there exists a permutation associated with dissipative systems determining many of the main geometric features of the global attractor. Under the nondissipative setting, we still manage to determine the heteroclinic connections on the noncompact global attractor based on the Sturm permutation method, by introducing the concept of suspension and  $k$ -nondissipativity. This is based on a joint work with C. Rocha (IST - Universidade de Lisboa).