A remark on the stability of planar traveling waves in scalar bistable reaction-diffusion equations

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This talk is concerned with the asymptotic behavior of solutions of a scalar bistable reaction-diffusion equation in the whole plane. It is well known that, under general conditions on the reaction term, the equation has a planar traveling wave solution connecting two stable constant solutions, and that it is stable under a wide class of initial perturbations. We observe that for some initial data whose level curve lies between a line and a cone, the corresponding solution asymptotically looks like a planar traveling wave in some region but travels faster.