

On the blow up of solutions for the exponential reaction-diffusion equation

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Abstract

I will discuss some results concerning radial blow up solutions of a semi-linear heat equation with an exponential source term. These results characterize the blow up rate and the final time blow up profile of the solutions. In particular we find that the solutions which can be continued beyond blow-up possess a nonconstant selfsimilar blow-up profile. This is a joint work with M. Fila.