

**Boumenir, Amin****On the blow-up rate by regular variation functions.** (English) Zbl 1212.35247

Differ. Integral Equ. 19, No. 5, 537-544 (2006).

Summary: We develop a direct method for obtaining the blow-up rate of positive solutions of semilinear parabolic equations by using the theory of regularly varying functions. The method is applicable to the case when the blow-up set is a single point.

**MSC:**[35K58](#) Semilinear parabolic equations[35B44](#) Blow-up in context of PDEs[35B09](#) Positive solutions to PDEs**Keywords:**[blow-up rate](#); [positive solution](#); [semilinear parabolic equation](#); [regularly varying functions](#)