

# On the large time behaviour of semilinear stochastic parabolic equations

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(joint work with F. Flandoli, J.A. Lopez-Mimbela and E. Kolkovska)

We consider semilinear stochastic partial differential equations which are extensions of deterministic equations studied initially by S. Kaplan and H. Fujita. Our aim is to know how the stochastic part influences on the blowup behaviour of positive solutions of these equations. By means of an associated random partial differential equation we give upper and lower bounds for the blowup time. Sufficient conditions for blowup in finite time and for the existence of global solutions can be deduced in terms of the parameters of the equation. The case where the gradient of the solution appears in the stochastic term will be considered too.

## References

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