

## **abstract**

MATHEMATICAL PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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In this talk I will review two recent works in collaboration with A. Bertozzi and T. Laurent and with M. DiFrancesco, A. Figalli, T. Laurent and D. Slepcev in which we prove infinite/finite time blow-up for generic initial data in several models. More precisely, we consider nonlinear friction equations with potentials with a singularity at the origin like the Morse potential in swarming models. Then, several comments will be done in connection to the case of the Poisson kernel and with linear diffusion as in the Keller-Segel model for chemotaxis, related to other recent work with Blanchet and Masmoudi.