

Large time behavior of coagulation-fragmentation equations with degenerate diffusion

Laurent Desvillettes, École Normale Supérieure de Cachan

We consider the Aizenmann-Bak model of coagulation-fragmentation for clusters together with a diffusion term w.r.t. the space variable which degenerates when the size of the clusters tends to infinity. We show that the solutions of this equation tend to a global equilibrium (that is, an exponential function w.r.t. size which does not depend upon space) with a rate close to exponential of the square of a logarithm.

This talk is based on a paper in common with Klemens Fellner.