Speaker: Gabriele Grillo

Title: *Uniqueness issues for the fast diffusion equation*

Abstract:

We investigate uniqueness of solutions to the fast diffusion equation in the Riemannian setting. A very general uniqueness result is shown to hold on manifolds whose curvature is, in a quantitative sense, not too negative at spacial infinity, whereas uniqueness does not hold even for bounded solutions if curvature is, again in a quantitative sense, very negative. An unexpected connection with properties of the linear heat semigroup is the key to get the latter result.