

## SEMINAIRE D'ANALYSE

➤ **VENDREDI 21 FEVRIER 2014 à 15h15 - salle MA A331**

Professeur **VINCENZO VESPRI** (Université de Florence, Italie) donnera une conférence sur le thème:

### «**Pointwise estimates for nonnegative solutions to a class of degenerate/singular parabolic equations**»

We consider the nonnegative solutions of the equation

$$u_t = \operatorname{div} A(x, t, u, Du), \quad (x, t) \in \mathbb{R}^N \times [0, +\infty),$$

where the operator  $A$  has nonsmooth coefficients and behaves like the  $p$ -Laplacean equation or like the Porous Medium Equation.

By using recent results obtained in collaboration with Bögelein, Calahorrano, Piro Vernier and Ragnedda we are able to give some pointwise estimates from above and from below starting from the value of the solution attained in a point. We apply these results to give sharp estimates to the fundamental solution of such class of equations.

Lausanne, le 3 février 2014

BD/vl