

SEMINAIRE D'ANALYSE

➤ **VENDREDI 5 MAI 2017 à 14h15 - salle MA A3 31**

Professeur **ALDO PRATELLI** (Université d'Erlangen-Nürnberg, Allemagne)
donnera une conférence sur le thème:

«On the closeness to the ball of sets with almost minimal first eigenvalue»

In the last years, there has been a lot of effort in order to prove qualitative and quantitative estimates about Laplace eigenvalues. This basically means the following. It is known that, among sets of unit volume in \mathbb{R}^N , the ball minimizes the first eigenvalue. Take then a set whose first eigenvalue coincides with the minimal one up to a small quantity: can we say that this set differs from a ball, in a suitable sense, of a power of this quantity? The answer is now known to be positive. We are interested in the following related question, originating from a conjecture of A. Henrot: given a set whose first eigenvalue coincides with the one of the ball up to a small quantity, can we say that also its other eigenvalues differ from those of the ball of powers of this quantity? This is a joint work with D. Mazzoleni.

Lausanne, le 27 avril 2017
BD/vl

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