

Persistence of integrated stable processes

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Time **Thursday, April 17, 2014 at 15:00**

Place **Campus Kirchberg, room B04**

We compute the persistence exponent of the integral of a stable Lévy process in terms of its self-similarity and positivity parameters. This solves a problem raised by Z. Shi (2003). Along the way, we investigate the law of the stable process L evaluated at the first time its integral X hits zero, extending classical formulae by McKean (1963) and Gorkov (1975) for integrated Brownian motion. This is joint work with Christophe Profeta (Evry-Val d'Essonne).