

December 16, 2013

2:30 pm, Auditori, Centre de Recerca Matemàtica



## Professor Tuomas Hytönen

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### *If you can't choose, throw Dice – Random Constructions in Harmonic Analysis*

#### Summary:

It is a well-known, yet striking, phenomenon in various fields of mathematics that sometimes a random selection can produce a better outcome than any explicit choice known to us. I will discuss a couple of recent examples of this probabilistic method that have played an important role in questions of harmonic analysis:

- ✓ a random decomposition of non-homogeneous singular integrals by F. Nazarov, S. Treil and A. Volberg, and
- ✓ a probabilistic construction of interpolating spline functions in very general domains by P. Auscher and myself.