SEMINARI D'ANÀLISI UAB-UB **Curs 2012–2013**

Dilluns 25 de febrer del 2013, 15:00h

Aula T2 (UB).

Inhomogeneous random zero sets.

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ABSTRACT:

We construct random point processes in the complex plane that are asymptotically close to a given doubling measure. The processes we construct are the zero sets of random entire functions that are constructed through generalised Fock spaces. We show that the average distribution of the zero set is close to the given doubling measure, and that the variance is much less than the variance of the corresponding Poisson point process. This indicates that the zero sets are more 'rigid' processes than the Poisson process. If there is time I will also mention some results on the 'hole probability', the probability that there are no zeroes in a given set, which gives another measure of the 'rigidity' of the zero set.