

Growth rates of frequently hypercyclic harmonic functions

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The notion of frequent hypercyclicity stems from ergodic theory and it was introduced by Bayart and Grivaux (2004). Many natural continuous linear operators are frequently hypercyclic, for instance the differentiation operator on the space of entire holomorphic functions.

We consider the partial differentiation operator acting on the space of harmonic functions on  $\mathbb{R}^n$  and we identify minimal growth rates, in terms of the  $L^2$  norm on spheres, of its frequently hypercyclic vectors. This answers a question posed by Blasco, Bonilla and Grosse-Erdmann (2010).

This is joint work with Eero Saksman and Hans-Olav Tylli.