



Seminário de Sistemas Dinâmicos da UFF

COMBINATORIAL CONSTRUCTIONS OF ERGODIC MEASURES

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Hora: 14h. **Atenção: novo horário !**

Local: Sala 407, Bloco H, Campus do Gragoatá.

Resumo

We study invariant measures of hereditary shift spaces, with an emphasis on symbolic dynamical systems associated with B -free numbers. Recall that a shift space over $0,1$ is hereditary if it is closed with respect to coordinatewise multiplication by $0,1$ sequences and we say that an integer n is B -free if n is not divisible by any element of B , where B is a given subset of positive integers. For example square-free integers are p^2 : p -prime-free. Sarnak proposed to study square-free numbers through dynamics of the shift space generated by the characteristic sequence of square-free numbers. Lemańczyk and his collaborators extended this idea to B -free shifts.

We prove that the set of ergodic measures is arcwise connected for every hereditary shift space and ergodic measures are entropy-dense if the shift can be approximated in the \bar{d} sense by sofic shifts. By Davenport-Erdos theorem the latter result applies to B -free systems. Here \bar{d} pseudodistance measures the upper asymptotic density of the set of positions where two sequences in a shift space differ.

(This is a joint work with Jakub Konieczny and Michal Kupsa).