

BERNOULLI DISJOINTNESS

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ABSTRACT. I will describe some features of a recent work by Todor Tsankov, Benjy Weiss, Andy Zuker and Eli Glasner. An abstract of this work follows:

Generalizing a result of Furstenberg, we show that for every infinite discrete group G , the Bernoulli flow 2^G is disjoint from every minimal G -flow. From this, we deduce that the algebra generated by the minimal functions $\mathfrak{A}(G)$ is a proper subalgebra of $\ell^\infty(G)$.

When G is countable, we prove that for any metrizable, minimal G -flow, there exists a free, minimal flow disjoint from it and that there exist continuum many mutually disjoint minimal, free, metrizable G -flows.

We use our methods to produce, for every countable infinite group, minimal flows with large groups of automorphisms. It then follows that, on the one hand every countable maxap group can be embedded in the automorphism group of a metrizable minimal G -flow, and on the other, using recent results of Cortez and Petite, that there are discrete countable groups which can not be so embedded.

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