

RENORMALIZED STIT TESSELLATIONS ARE BERNOULLI FLOWS

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Resumo/Abstract:

A STIT tessellation process $Y = (Y_t : t > 0)$ is a Markov process taking values in the space of tessellations of an Euclidean space ℓ . For $a > 1$ we show that $Z = (Z_t := a^t Y_{a^t} : t \in \mathbb{R})$ is a time stationary Markov process and that along the integers ${}^d \wedge W = (Z_n : n \in \mathbb{Z})$ is a finitary factor of a (generalized) Bernoulli shift with null anticipating length. Hence, the discrete time process ${}^d \wedge W = (Z_n : n \in \mathbb{Z})$ is isomorphic to a Bernoulli shift of infinite entropy and the time continuous process $\wedge W = (Z_t : t \in \mathbb{R})$ is isomorphic to a Bernoulli flow of infinite entropy.