

Infinite words and universal free actions

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This is the second paper in a series of three, where we take on the unified theory of non-Archimedean group actions, length functions and infinite words. Here, for an arbitrary group G of infinite words over an ordered abelian group Λ we construct a Λ -tree Γ_G equipped with a free action of G . Moreover, we show that Γ_G is a universal tree for G in the sense that it isometrically embeds in every Λ -tree equipped with a free G -action compatible with the original length function on G .

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