

# Suffix-connected languages

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Inspired by a series of papers initiated in 2015 by Berthé et al., we introduce a new condition called suffix-connectedness. We show that the groups generated by the return sets of a uniformly recurrent suffix-connected language lie in a single conjugacy class of subgroups of the free group. Moreover, the rank of the subgroups in this conjugacy class only depends on the number of connected components in the extension graph of the empty word. We also show how to explicitly compute a representative of this conjugacy class using the first order Rauzy graph. Finally, we provide an example of suffix-connected, uniformly recurrent language that contains infinitely many disconnected words.