DIMENSION GROUP OF DENDRIC SUBSHIFTS

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Given a language \mathcal{L} with symbols in a finite alphabet \mathcal{A} , one can associate to every word w in \mathcal{L} a bipartite graph, called the extension graph of w, in which one puts edges between left and right copies of letters a, b when awbbelongs to \mathcal{L} . If for every w in \mathcal{L} this graph is a tree, the symbolic system generated by the language is called a dendric subshift. Dendric subshifts are therefore defined in terms of combinatorial properties of their language. They have linear factor complexity. This class of subshifts encompasses Sturmian subshifts as well as subshifts generated by regular interval exchanges. We study the dimension group of dendric subshifts, providing necessary and sufficient conditions for two dendric subshifts to be (strong) orbit equivalent. This is a joint work with V. Berthé, F. Dolce, F. Durand, J. Leroy, S. Petite and D. Perrin.