

Algebras of one-sided subshifts over arbitrary alphabets

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Given an alphabet, which can be infinite, we consider subshifts given by a set of forbidden words as a combinatorial object and define algebras associated with them. When the alphabet is finite, these include Carlsen's C^* -algebras associated with subshifts. In this talk, I will explain how one naturally obtains a partial action from a subshift and how to use it to define the subshift algebras. As with graphs, even though we start with a combinatorial object, there are some topological spaces from these algebras, one of them being the Ott-Tomforde-Willies (OTW) subshifts. I will show how these C^* -algebras are related to the conjugacy of Ott-Tomforde-Willis subshifts. At the end, I will briefly talk about the K-theory of the subshift C^* -algebras. (Joint work with G. Boava, D. Gonçalves and D. van Wyk.)

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