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Jakub Byszewski* (jakub.byszewski@gmail.com). *Substitutive systems and a finitary version of Cobham's theorem.*

We study substitutive systems generated by nonprimitive substitutions and show that transitive subsystems of substitutive systems are substitutive. As an application we obtain a complete characterisation of the sets of words that can appear as common factors of two automatic sequences defined over multiplicatively independent bases. This generalises the famous theorem of Cobham and answers a question posed by Jeffrey Shallit.

The talk is based on joint work with Jakub Konieczny and Elżbieta Krawczyk. (Received September 16, 2019)