1154-05-1299 **Svetlana Puzynina***, Saint Petersburg State University, 7-9 Universitetskaya Emb., Saint Petersburg, 199034, Russia. *Abelian subshifts.*

Two finite words u and v are called abelian equivalent if each letter of the alphabet occurs the same number of times in both u and v. The abelian subshift $\mathcal{A}_x$ of an infinite word x is the set of words y such that, for each factor u of y, there exists a factor v of x such that u and v are abelian equivalent. The notion of an abelian subshift gives a characterization of Sturmian words: among binary uniformly recurrent words, Sturmian words are exactly those words for which $\mathcal{A}_x$ equals the shift orbit closure Ω_x. On the other hand, the abelian subshift of the Thue-Morse word contains uncountably many minimal subshifts. In this talk we discuss general properties of abelian subshifts. In particular, we consider the abelian subshifts of binary words, non-binary balanced words, and characterize abelian subshifts of aperiodic words of minimal complexity over an alphabet of cardinality k for each $k \geq 2$. (Received September 14, 2019)