VICTOR SELIVANOV, Fine Hierarchy of ω-Regular k-Partitions. Novosibirsk Pedagogical University, Russian Federation.

E-mail: selivanov@informatik.uni-wuerzburg.de.

We develop the theory of  $\omega$ -regular k-partitions (for arbitrary  $k \geq 2$ ) that extends the theory around the Wagner hierarchy of regular  $\omega$ -languages. In particular, we characterize the structure of Wadge degrees of  $\omega$ -regular k-partitions, prove the decidability of any level of the corresponding hierarchy, establish coincidence of the reducibilities by continuous functions and by functions computed by finite automata on the  $\omega$ -regular k-partitions.