

The presented work contains the history of origin of measure, its connection with measurable cardinals and summary of all elementary definitions and notions needed for the generalization of ultrapower construction in model theory for proper classes. One of the parts of the presented theory is the proof of elementary properties needed for the application of ultrapower construction to measurable cardinals. Using all previous results we prove the Theorem of Dana Scott about the connection between existence of a measurable cardinal and the size of the universe.