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On Some Theoretical Models of Dark Energy and Relations between Them RATBAY MYRZAKULOV, Eurasian National University — There are exist two types of theoretical models of dark energy (DE). First type models are given by General Relativity (GR) that is by Einstein equations with some sources (usual scalar fields, phantom fields, k-essence and so on). Second type models are given by some modified gravity theories like F(R), F (G), F(T) etc and consider DE as geometrical properties of spacetime without any matter sources. In this talk we consider some theoretical models of DE. Also we study the relations between these models. In particular, we show that modified teleparallel gravity or F(T) gravity and k-essence is equivalent each to other. Finally we present some new classes theoretical models of DE.

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