

Esercizio 1. The language contains only the binary relations $<$ and e . The theory T_0 says that $<$ is a strict linear order and that e is an equivalence relation. The category \mathcal{M} consists of models of T_0 and partial isomorphisms. Do rich models exist? Can we axiomatize their theory? If so, does it have elimination of quantifiers? Is it λ -categorical for some λ ?

(Eventuali espressioni formali possono essere espresse nel linguaggio naturale, è sufficiente evitare ambiguità.)

Esercizio 2. Prove that every model of T_{dag} and T_{acf} is ω ultrahomogeneous (independently of cardinality and transcendence degree).

La definizione di ultraomogeneo non è stata data a lezione, va cercata nelle dispense.