

Esercizio 1. 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.

Esercizio 2. Let M and N be elementarily homogeneous countable structures. Suppose that $M \models \exists x p(x) \Leftrightarrow N \models \exists x p(x)$ for every $p(x) \subseteq L$ such that $|x| < \omega$. Prove that the two structures are isomorphic.

Esercizio 3. Work inside a monster model \mathcal{U} . Let $\varphi(x) \in L$. Prove that the following are equivalent

1. $\varphi(x)$ is equivalent to some $\psi(x) \in L_{\text{qf}}$;
2. $\varphi(a) \leftrightarrow \varphi(fa)$ for every a and every partial isomorphism $f : \mathcal{U} \rightarrow \mathcal{U}$ defined in a .