

1 Proposition Let $\varphi(x, y) \in L(M)$ have NIP. Then for every tuple c there are a model $N \supseteq M$ such that $N \downarrow_M^u c$ and a formula $\psi(x) \in L(N)$ such that $\varphi(N, c) = \psi(N)$.

We say that N is C -saturated if it realizes every type $p(x)$ over N, C that has $< |N|$ parameters from N and is finitely consistent in N . Here x is a tuple of length $\leq |N|$.

2 Lemma If $B \downarrow_M^u C$ then there is a C -saturated model $N \supseteq M, B$ and $N \downarrow_M^u C$.

3 Lemma If $N \downarrow_M^u C$ and N is C -saturated then for every type .