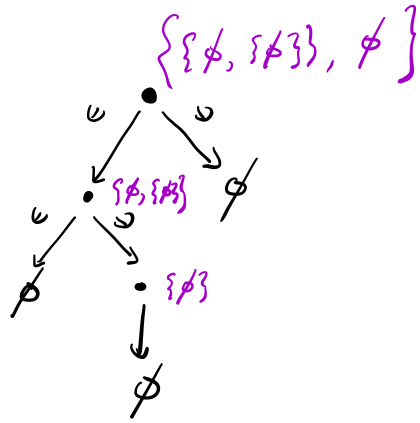
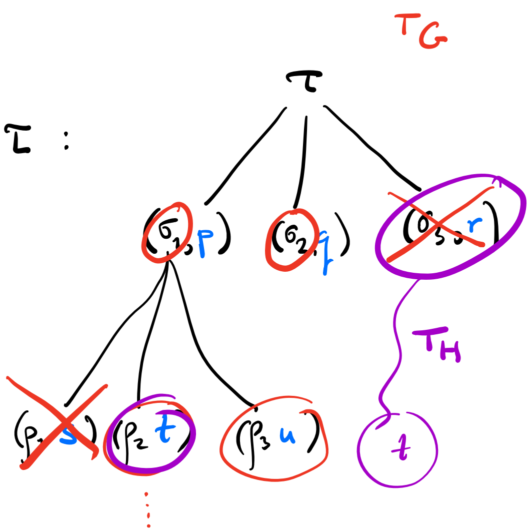
set:



$\mathbb{P}$- name τ :



$p, q, r \in \mathbb{P}$
s, t, u

$G \subseteq \mathbb{P}$
generic filter

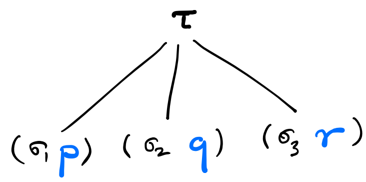
$p, q, t, u \in G$
$s, r \notin G$

H

$M[G] = \{ \tau_G \mid \tau \ \mathbb{P}\text{-name}, \tau \in M \}$

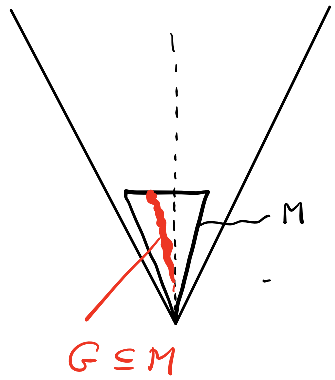
$=$ " closure of $M \cup \{G\}$ under the ZFC- axioms "

$G \notin M$ $\qquad$ $G \subseteq M$



$\{p : p \in G\} \subseteq \mathbb{P} \in M$

$\hookrightarrow \notin M$



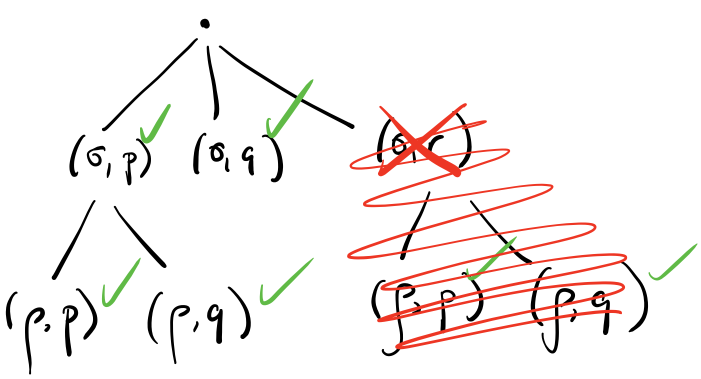
$\mathrm{Ord} \cap M = o(M)$

this is a set

$M \models (\mathrm{Ord} \cap M =$ proper class of all ordinals$)$

$T_G = \{ \sigma_G \mid \exists (\sigma, p) \in T \quad \exists p \in G \}$

rec.



$$M[G] \models \phi \quad \leftrightarrow \quad \exists p \in G \; (p \Vdash \phi)^M$$

? τ_G

$\phi(\tau_G)$ true or not ?

$$\boxed{p \Vdash \phi(\tau)}$$