Given $T$ on $M$ and $U$ on $M_\beta^\sigma$, where $lh(T) = \theta + 1$ both normal. Assume $U$ has a last model $P$.

$$p \rightarrow \text{last model of } W(T, U)$$

We define $W(T, U)$, normal. Define by induction on $\gamma$:

$$W(T, U)(\gamma + 1) \equiv W_{\gamma}$$

Also define for $\gamma < \kappa$ a partial map

$$\varphi_{\gamma+1} : \text{Emb}(W_{\gamma}) \rightarrow \text{Emb}(W_{\gamma+1})$$

(Also: $W(T, U) = \gamma \text{th} \gamma^{\kappa}(\mathbf{F})$ if $\mathbf{F}$ not total on $M_\beta^\sigma \setminus (E_\beta^\sigma)$

$$\text{dom } \varphi = \beta + 1$$

And

$$\varphi_{\gamma+1} : M_\beta^\sigma \setminus (E_\beta^\sigma) \times M_\beta^\sigma \rightarrow \text{Emb}(W_{\gamma+1}) \setminus \text{dom } \varphi_{\gamma}$$

Let $R_\gamma = M_\beta^\sigma \setminus (E_\beta^\sigma) = \text{last model of } W_{\gamma}$.

We will have $\varphi_{\gamma+1} : M_\beta^\sigma \rightarrow R_\gamma$

$\cdot W_\gamma = \varphi$

Given $W_\gamma$: let $\sigma_{\gamma}(E_\gamma^\sigma) = F_\gamma$

$$\gamma = U \setminus \text{pred}(\gamma + 1)$$

$$W_{\gamma+1} = W(W_\gamma, F_\gamma)$$
\[ \phi_{v,1}(x) = \phi_{v+1}(x) \]

\[ \pi_{y,v+1} = \pi_{y,v+1} \]

\[ M_y \xrightarrow{\sigma_y} R_y = M_{y+1}^{w_y} \]

Let \( x \) be a limit \( \in \mathcal{U}(y) \). Define \( W_x \). Let

\[ b = \left( 0, x \right)_y \quad \text{We have for } v < u, v' < b \]

So we can define

\[ \phi_{v,1}(3) \text{ for each } 3 \text{ s.t.} \]

\[ \phi_{v,1}(3) \text{ is done if } \phi_{v,1}(3) \]

\[ M_w(\mathcal{U}) = \text{the set of all such } \phi_{v,1}(3) \]

\[ \pi_{y,v} : M_{v+1}^{w_y} \rightarrow M_{v}^{w_x} \]

From taking direct limit \( A \)

\[ \pi_{y,v} : M_{v+1}^{w_y} \rightarrow M_{v+1}^{w_{y+1}} \]

\[ \phi_{v,1}(3) : \phi_{v,1}(3) \rightarrow \phi_{v+1}(3) \]
\[ E^W \triangleq \pi_{\lambda_1} (E^W) \]

This was the case when \( U \) had a last model.

Now if \( \text{ln}(U) = \lambda \) limit:

\[ W(\theta, U) = \bigcup_{\gamma < \lambda} W_\gamma (\omega_\gamma + 1) \]

\[ \theta_\gamma = \text{least } s.t. \; F_\theta \text{ is on the} \]

\[ M_{\theta_\gamma} \text{ sequence} \]

\[ W_\gamma (\omega_\gamma + 1) = W_\gamma (\omega_\gamma, 1) \; \forall \gamma \geq \gamma \]

Branches of \( W(\theta, U) \):

\[ \alpha \sim (c, b) \]

Given \( b \) let \( \gamma \) be least s.t. \( E_\gamma \) is an admissible on \( R_1, \gamma \).

\[ (c, b) \text{ determined by downward closure of } U \text{ of} \]

\[ \xi \text{ of } (\gamma, 3) \mid 3 \in c \]

If \( \gamma \) is a limit ordinal then the definition

\[ \alpha = \text{ln}(b, c) \text{ makes sense for any } c \text{ cofinal in } \xi. \]
Fact. Every colored branch \( a \) of \( W(\tau, u) \) has the form \( b_n(c, b) \) where \( b \) is colored in \( U_c \) and \( b, c \) are determined by \( a \).

Given \( F \) a strategy for \( M! \):

\[
\exists \text{ normalized well } \langle \pi, W_i \rangle \in F \in W(\pi, U) \quad (1)
\]

\( \exists \text{ normalized well } \Rightarrow \ a = \exists c \in W(\pi, U) \quad (2) \)

\[
\Rightarrow \ a = b_n(c, b) \text{ where } b = \exists c \in W(\pi, U) \text{ and } c = \exists c \in (\exists c \sup (c))
\]

Want every \( \exists c \) has this property

\[
\exists c \text{ normalized well}
\]

\[
\exists c \in W(\pi, U)
\]

\[
\exists c \sup (c)
\]

\[
\exists c \in (\exists c \sup (c))
\]

\[
\exists c \sup (c) \Rightarrow \exists c \sup (c) \Rightarrow \exists c \sup (c)
\]

\[
\exists c \sup (c) \Rightarrow \exists c \sup (c) \Rightarrow \exists c \sup (c)
\]

\[
\exists c \sup (c) \Rightarrow \exists c \sup (c) \Rightarrow \exists c \sup (c)
\]
strong hull conclusion: let \( \mathcal{U} \) be normal tree on \( M \). A pseudo-hull embedding of \( \mathcal{U} \) into \( \mathcal{V} \) is a

\[
\langle u, u' \beta, v < \ell h(\mathcal{V}) \rangle, \langle u, u' \beta, v < \ell h(\mathcal{U}) \rangle, \mathcal{V}\rangle
\]

s.t.

(a) \( u, \ell h(\mathcal{V}) \to \ell h(\mathcal{U}) \) s.t. \( (u, v_0, v_1, \ldots) \)

(b) \( p_S \in E \) induces \( \hat{\mathcal{V}} \to \hat{\mathcal{U}} \)

\( \hat{\mathcal{V}}(S) = \text{downward closure of } p'' \cup g(S) \)

(c) let \( v : \ell h(\mathcal{V}) \to \ell h(\mathcal{U}) \) be given by

\[
s(v_0) = \hat{\mathcal{U}}(\hat{\mathcal{V}}(S))
\]

Then,

\[
t^0_{\beta} : M_{\beta} \to M_{\beta}^U_{\mathcal{U}(\beta)}
\]

is bounded and elementary. For \( v \beta \leq \beta \)

\[
t^0_{\beta} \circ u_{\beta}^\mathcal{U} = u_{\mathcal{U}(\beta)}^\mathcal{U} \circ \alpha
\]

(d) For \( v + 1 < \ell h(\mathcal{V}) \), \( v(u) \leq u(v(a)) \)

\[
t^1_{\beta} = u_{v(a), u(a)}^\mathcal{U} \circ t^0_{\beta}
\]

and

\[
p_\beta(E_{\alpha}^v) = E_{u(a)}^U = t^1_{\alpha}(E_{\alpha}^v)
\]

and

\[
t^0_{\beta} \mathcal{V}(E_{\alpha}^v) + 1 = t^1_{\alpha} \mathcal{V}(E_{\alpha}^v) + 1 \text{ for } \alpha \leq \beta
\]
(a) If \( \beta = \tau_{\text{red}}(2+1) \) then
\[
U - \text{red} (u(x) + 1) \subseteq [v(\alpha), u(\alpha)]_U
\]
and for \( U^* = U - \text{red} (u(x) + 1) \):
\[
\tau_{d+1}(\Gamma a_t f)_{\beta} = [\tau_{a}^d (a_I) e^u_{v(\alpha)} E_u^v_{v(\alpha)} o \tau_{\beta}^d (f)]_{E_u^v_{v(\alpha)}}
\]

\[\Sigma\] has strong hull condensation at

\( U \models \Sigma \) and \( \mathcal{F}\) pseudo-hull of \( U \)

\[\Rightarrow \mathcal{F} \models \Sigma\]