$$\underset{0}{\nabla}\mathbb{K} \ni \daleth \text{ voll treu}$$

$$\daleth \supset \natural \text{ pre-comp } \Leftrightarrow \bigwedge_{U}^{\mathcal{U}} \bigvee_{\eta_1 \cdots \eta_n}^{\natural} \bigcup_i \natural \subset \underbrace{\eta_i + U}$$

$$\Rightarrow: \quad \bigwedge_{\gamma}^{\overline{\natural}} \bigvee_{\eta}^{\natural} \gamma - \eta \in U \Rightarrow \gamma \in \eta + U \Rightarrow \overline{\natural} \subset \bigcup_{\eta}^{\natural} \underbrace{\eta + U} \underset{\overline{\natural}\ \text{cpt}}{\Rightarrow} \bigvee_{\eta_1 \cdots \eta_n}^{\natural} \subset \bigcup_i \eta_i + U \supset \overline{\natural} \supset \natural$$

$$\Leftarrow: \quad \mathcal{P}\left(\overline{\natural}\right) \supset \mathcal{M} \text{ UltFil}$$

$$\mathcal{M} \underset{\text{CauFil}}{\rightsquigarrow}$$

$$\bigwedge_{U}^{\mathcal{U}} \bigvee_{V}^{\mathcal{U}} V - V \subset U \Rightarrow \bigvee_{W}^{\mathcal{U}} \text{⅂} \supset W \subset V \underset{\text{Vor}}{\Rightarrow} \bigvee_{\text{ч}_1 \cdots \text{ч}_n}^{\text{Ч}} \text{Ч} \subset \bigcup_i \underbrace{\text{ч}_i + W}$$

$$\Rightarrow \overline{\text{Ч}} \subset \overline{\bigcup_i \underbrace{\text{ч}_i + W}} = \bigcup_i \overline{\text{ч}_i + W} = \bigcup_i \underbrace{\text{ч}_i + \overset{= W}{\overline{W}}} = \bigcup_i \underbrace{\text{ч}_i + W}$$

$$\bigvee_j \bigwedge_M^{\mathcal{M}} \overbrace{\text{ч}_j + W} \cap M \neq \varnothing$$

$$\lightning \bigwedge_i \bigvee_{M_i}^{\mathcal{M}} \overbrace{\text{ч}_i + W} \cap M_i = \varnothing$$

$$\Rightarrow M_i \subset \overline{\text{Ч}} \llcorner \overbrace{\text{ч}_i + W} \Rightarrow \bigcap_i M_i \subset \bigcap_i \underbrace{\overline{\text{Ч}} \llcorner \overbrace{\text{ч}_i + W}} = \overline{\text{Ч}} \llcorner \overbrace{\bigcup_i \underbrace{\text{ч}_i + W}} = \varnothing \Rightarrow \mathcal{M} \ni \bigcap_i M_i = \varnothing \lightning$$

$$\mathcal{B} = \frac{\overbrace{\text{ч}_j + W} \cap M}{M \in \mathcal{M}} \text{ FilBasis}$$

$$\bigwedge_M^{\mathcal{M}} \overbrace{\text{ч}_j + W} \cap M \neq \varnothing$$

$$\underbrace{\overbrace{\text{ч}_j + W} \cap M} \cap \underbrace{\overbrace{\text{ч}_j + W} \cap \acute{M}} \supset \overbrace{\text{ч}_j + W} \cap \underbrace{M \cap \acute{M}}_{\in \mathcal{M}}$$

$$< \mathcal{B} > = \mathcal{M}$$

$$M \in \mathcal{M} \Rightarrow M \supset M \cap \overbrace{\text{ч}_j + W} \in \mathcal{B} \Rightarrow M \in < \mathcal{B} > \Rightarrow \mathcal{M} \subset < \mathcal{B} > \underset{\text{ultra}}{\Rightarrow} \mathcal{M} = < \mathcal{U} >$$

$$\overline{\text{Ч}} \in \mathcal{M} \Rightarrow \overline{\text{Ч}} \cap \overbrace{\text{ч}_j + W} \in \mathcal{B} \subset \mathcal{M} \Rightarrow \overline{\text{Ч}} \cap \overbrace{\text{ч}_j + W} \in \mathcal{M}$$

$$\bigwedge_{\dot{\text{˥}}}^{\overline{\text{Ч}} \cap \overbrace{\text{ч}_j + W}} \bigvee_{\dot{\text{ꞁ}}}^{W} \dot{\text{˥}} = \text{ч}_j + \dot{\text{ꞁ}} \Rightarrow \text{˥} - \acute{\text{˥}} = \overbrace{\text{ч}_j + \text{ꞁ}} - \overbrace{\text{ч}_j + \acute{\text{ꞁ}}} = \text{ꞁ} - \acute{\text{ꞁ}} \in W - W \subset V - V \subset U \Rightarrow M - M \subset U$$

$$\Rightarrow \mathcal{M} \rightsquigarrow \text{˥} \in \text{⅂} \text{ voll } \Rightarrow \text{˥} \in \overline{\text{Ч}} \sqsubset \text{⅂} \Rightarrow \overline{\text{Ч}} \text{ cpt}$$