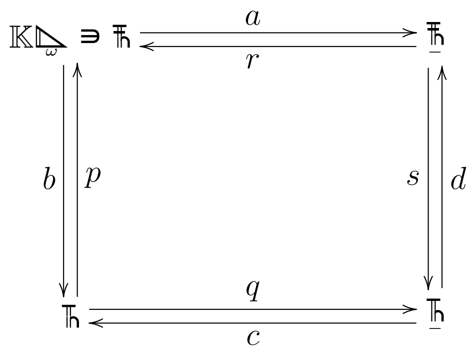

$$\underline{\mathbb{h}} = \frac{\flat \in \underline{\mathbb{h}}}{{}^{\mathbb{R}\flat}\mathfrak{e} \subset \mathbb{h}}$$

$$\underline{\mathbb{h}} = \mathbb{R}\frac{\lim \overline{\flat_k}}{{}^{\mathbb{h} \cap U}\not{\mathfrak{e}} \ni \flat_k \rightsquigarrow 0}$$

$$\subset: \quad \flat \in \underline{\mathbb{h}} \Longrightarrow {}^{\mathbb{R}\flat}\mathfrak{e} \subset \mathbb{h} \Longrightarrow \bigwedge_{1 << k} {}^{\mathbb{h} \cap U}\not{\mathfrak{e}} \ni \frac{\flat}{k} \rightsquigarrow 0 \Longrightarrow \flat = \overline{\flat} \lim \overline{\frac{\flat}{k}} \text{ cst folg}$$

$$\supset: \quad \flat = s \lim \overline{\flat_k}$$

$$\overline{\flat_k} = \frac{\overline{\flat_k}}{\flat_k}$$

$$t \in \mathbb{R} \underset{\text{OE}}{\Longrightarrow} 0 \leqslant st$$

$$m_k = [\frac{st}{\overline{\flat_k}}] \Longrightarrow st - \overline{\flat_k} < m_k \overline{\flat_k} \leqslant st \Longrightarrow m_k \overline{\flat_k} \rightsquigarrow st$$

$$\mathbb{h} \ni {}^{\flat}_{k}\mathfrak{e}^{m_k} = {}^{m_k {}^{k}\flat}\mathfrak{e} = {}^{m_k \overline{\flat_k}\overline{\flat_k}}\mathfrak{e} \rightsquigarrow {}^{t\flat}\mathfrak{e} \in \bar{\mathbb{h}} = \mathbb{h} \Longrightarrow \flat \in \underline{\mathbb{h}}$$

$$\underline{\hbar} \sqsubset_{\text{lin}} \underline{\hbar}$$

$$\dot{\flat} \in \underline{\underline{\hbar}} \Rightarrow {}^t\dot{\varphi} = {}^{t\dot\flat}\mathfrak{e} \in \hbar \cap V \Rightarrow {}^t\varphi\, {}^t\acute{\varphi} \in \hbar \cap U$$

$$\text{diff}\ {}^t\flat = {}^t\varphi\,{}^t\acute\varphi\,|\not{\mathfrak{e}} \rightsquigarrow {}^0\flat = 0$$

$$\tilde{}\flat = (\varphi\times\acute\varphi)\rtimes\mu\rtimes\not{\mathfrak{e}} \Rightarrow \frac{{}^{1/k}\flat}{1/k} \rightsquigarrow {}^0\underline{\flat} = {}^0\underline{\varphi\times\acute\varphi}\,{}^{e:e}\underline{\mu}\,{}^e\underline{\not{\mathfrak{e}}} = \left(\flat:\acute\flat\right) + \imath = \flat + \acute\flat$$

$$\overline{\flat+\acute\flat}\,\frac{{}^{1/k}\flat}{\overline{{}^{1/k}\flat}} = \overline{\flat+\acute\flat}\,\frac{{}^{1/k}\flat}{1/k}\,\frac{1/k}{\overline{{}^{1/k}\flat}} \rightsquigarrow \overline{\flat+\acute\flat}\,\exists\flat+\acute\flat\,\overline{\flat+\acute\flat} = \flat+\acute\flat \in \underline{\hbar}$$

$$\hbar \supset {}^{\underline{\hbar}}\mathfrak{e} \ni\ni e \text{ e-nbhd} \Rightarrow \hbar \supset {}^{\underline{\hbar}\cap W}\mathfrak{e}$$

$$\lightning\ {}^{\underline{\hbar}}\mathfrak{e} \text{ not e-nbhd} \Rightarrow \bigvee_{h_k\in\hbar} {}^{\underline{\hbar}}\mathfrak{e} \not\ni h_k \rightsquigarrow e$$

$$\underline{\hbar} = \underline{\hbar}\times\bar\flat \ni (\flat:\acute\flat) \mapsto {}^\flat\mathfrak{e}\,{}^{\acute\flat}\mathfrak{e} \in \hbar \text{ diffeo at e} \Rightarrow h_k = {}^{\flat_k}\mathfrak{e}\,{}^{\acute\flat_k}\mathfrak{e}$$

$$\underline{\hbar} \ni \flat_k \rightsquigarrow 0$$

$$\bar\flat \ni \acute\flat_k \rightsquigarrow 0 : \acute\flat_k \neq 0$$

$$\text{OE } \overline{\acute\flat_k} \rightsquigarrow \acute\flat \in \bar\flat$$

$${}^{\acute\flat_k}\mathfrak{e} = \left({}^{\flat_k}\mathfrak{e}\right)^{-1} h_k \in \hbar\cap U \Rightarrow \acute\flat_k \in {}^{\hbar}\not{\mathfrak{e}}\cap U \Rightarrow \acute\flat \in \underline{\hbar}\cap\bar\flat = 0\ \lightning$$

$$\text{Atlas} \bigwedge_{h\in\hbar} \hbar \supset h^{\underline{\hbar}\cap W}\mathfrak{e} \xrightarrow[m\mapsto {}^{h^{-1}m}\not{\mathfrak{e}}]{\Downarrow_h} \underline{\hbar}\cap W$$

$$\Rightarrow \hbar \in \mathbb{K}\triangle_\omega$$