$$\mathbb{K}\triangledown_{\mathbb{I}} = \frac{\mathbb{K} \xleftarrow[\text{stet hom}]{\mathbb{L}} \mathbb{I}}{\mathbb{L} \neq 0} = \frac{\mathbb{K} \xleftarrow[\text{stet hom}]{\mathbb{L}} \mathbb{I}}{\mathbb{L}e = 1} \; \mathbb{I}^\sharp \,|\, \mathbb{I} \text{ cpt}$$

$$\mathbb{I}^\sharp \subset \mathbb{I}^t_1\,(0)$$

$$\ulcorner\mathbb{T}\urcorner < 1 \Rightarrow \ulcorner\mathbb{T}^n\urcorner \leqslant \ulcorner\mathbb{T}\urcorner^n \rightsquigarrow 0 \Rightarrow \mathbb{I} \ni \mathbb{T}^n \rightsquigarrow 0 \underset{\text{stet}}{\Rightarrow} 0 \leftsquigarrow \mathbb{L}\,\mathbb{T}^n = \overbrace{\mathbb{L}\mathbb{T}}^n \Rightarrow \ulcorner\mathbb{L}\mathbb{T}\urcorner < 1 \Rightarrow \ulcorner\mathbb{L}\urcorner \leqslant 1$$

$$\mathbb{I} \text{ unit } \Rightarrow \mathbb{K}\triangledown_{\mathbb{I}} = \frac{\mathbb{L} \in \mathbb{K}\triangledown^{}_{0\,\mathbb{I}}}{\mathbb{L}e = 1} \; \mathbb{I}^\sharp \,|\, \mathbb{I} \text{ cpt}$$

$$\mathbb{L} \neq 0 \Rightarrow \bigvee_{\mathbb{T} \in \mathbb{I}} 0 \neq \mathbb{L}\mathbb{T} = \mathbb{L}\,(\mathbb{T}e) = \underbrace{\mathbb{L}\mathbb{T}}\,(\mathbb{L}e) \Rightarrow \mathbb{L}e = 1$$

$$\Rightarrow \mathbb{K}\triangledown_{0\,\mathbb{I}} \overset{\text{abg}}{\subset} \mathbb{I}^\sharp_1\,(0) \; \mathbb{I}^\sharp \,|\, \mathbb{I} \text{ cpt} \Rightarrow \mathbb{K}\triangledown_{0\,\mathbb{I}} \; \mathbb{I}^\sharp \,|\, \mathbb{I} \text{ cpt}$$

$$\mathbb{I} \in \overset{n}{\underset{0}{\triangledown}}\mathbb{C} \text{ abel unit Balg } 1 \neq 0 \Rightarrow (1) \bigwedge_{\mathfrak{m} \overset{\max}{\sqsubset} \mathbb{I}} \begin{cases} \bigvee \mathbb{L} \in \mathbb{C}\triangledown_{0\,\mathbb{I}} \\ \ker \mathbb{L} = \mathfrak{m} \end{cases} \quad (2)\; \mathbb{C}\triangledown_{0\,\mathbb{I}} \neq \varnothing$$

$$(1)\; \mathfrak{m} \overset{\max}{\sqsubset} \mathbb{I} \Rightarrow \mathfrak{m} \subset \mathbb{I} \llcorner \mathbb{I}_{\mathsf{C}} \subsetneq \mathbb{I} \Rightarrow \mathbb{I} \overset{\text{ex}}{\sqsupset} \hat{\mathfrak{m}} \subset \mathbb{I} \llcorner \mathbb{I}_{\mathsf{C}} \Rightarrow \hat{\mathfrak{m}} \neq \mathbb{I} \Rightarrow \mathfrak{m} = \hat{\mathfrak{m}} \sqsubset \mathbb{I}$$

$$\Rightarrow \overset{n}{\underset{0}{\triangledown}}\mathbb{C} \ni \mathbb{I} \ulcorner \mathfrak{m} \text{ abel Balg field } \underset{\text{GM}}{\Rightarrow} \mathbb{I} \ulcorner \mathfrak{m} = \mathbb{C}\,\overbrace{e \ulcorner \mathfrak{m}}$$

$$\mathbb{I} \ulcorner \mathfrak{m} \xleftarrow[\text{stet hom}]{\pi} \mathbb{I} \Rightarrow \bigvee \mathbb{L} \in \mathbb{C}\triangledown_{0\,\mathbb{I}} : \bigwedge_{\mathbb{T} \in \mathbb{I}} \mathbb{T} + \mathfrak{m} = {}^{\pi}\mathbb{T} = {}^{\mathbb{L}}\mathbb{T}\,\underbrace{e + \mathfrak{m}} = {}^{\mathbb{L}}\mathbb{T}e + \mathfrak{m} \Rightarrow \ker \mathbb{L} = \ker \pi = \mathfrak{m}$$

$$(2) \bigvee \mathfrak{m} \overset{\max}{\sqsubset} \mathbb{I}$$

$$\mathbb{K}\triangledown_{0\,\mathbb{I}} \underset{\text{off}}{\subset} \mathbb{K}\triangledown_{0\,\mathbb{I}\times\mathbb{K}} = \mathbb{K}\triangledown_{0\,\mathbb{I}} \cup \infty$$

$$\mathbb{K}\triangledown_{0\,\mathbb{I}\times\mathbb{K}} = \frac{\mathbb{K} \xleftarrow[\text{stet lin}]{\mathbb{L}} \mathbb{I}\times\mathbb{K}}{\mathbb{L}\,\underbrace{0,1} = 1}$$

$$\text{non-unit } \mathbb{I} \sqsubset \mathbb{I}\times\mathbb{K} \in \overset{n}{\underset{0}{\triangledown}}\mathbb{K} \text{ voll } \mathbb{T} \mapsto \underbrace{\mathbb{I}{:}0} \Rightarrow \mathbb{I} \overset{\sharp}{\times} \mathbb{K} \xrightarrow[w^* \text{ stet}]{i^\sharp} \mathbb{I}^\sharp$$

$$
{}^{\mathbb{L}}\left(i^{\sharp}\right) = \mathbb{L}\,\big|_{\mathbb{1}\times 0}
$$

$$
\mathbb{1}\overset{\sharp}{\times}0 = \frac{\mathbb{L}\in\mathbb{1}\overset{\sharp}{\times}\mathbb{K}}{{}^{\mathbb{L}}i^{\sharp}\neq 0} \subsetneq \mathbb{1}\overset{\sharp}{\times}\mathbb{K} \in \underset{0}{\overset{0}{\triangle}}\, w^{*} \text{ cpt}
$$

$$
\mathbb{L}\in\mathbb{1}\overset{\sharp}{\times}0 \Longrightarrow \bigvee_{\mathbb{1}\in\mathbb{1}} {}^{\mathbb{L}}\overparen{\mathbb{1}{:}0} \neq 0
$$

$$
\Longrightarrow \frac{-\acute{\mathbb{L}}\in\mathbb{1}\overset{\sharp}{\times}\mathbb{K}}{\overbrace{\underbrace{\acute{\mathbb{L}}-\mathbb{L}}\underbrace{\mathbb{1}{:}0}} < \overbrace{{}^{\mathbb{L}}\overparen{\mathbb{1}{:}0}}} \subset \mathbb{1}\overset{\sharp}{\times}0 \Longleftarrow \overbrace{{}^{\mathbb{L}}\overparen{\mathbb{1}{:}0}} - \overbrace{{}^{\acute{\mathbb{L}}}\overparen{\mathbb{1}{:}0}} \leqslant \overbrace{\underbrace{\acute{\mathbb{L}}-\mathbb{L}}\underbrace{\mathbb{1}{:}0}} < \overbrace{{}^{\mathbb{L}}\overparen{\mathbb{1}{:}0}} \Longrightarrow 0 < \overbrace{{}^{\acute{\mathbb{L}}}\overparen{\mathbb{1}{:}0}}
$$

$$
\Longrightarrow \mathbb{1}\overset{\sharp}{\times}\mathbb{K}\left(o = \mathbb{L}p = \mathbb{1}{:}0{:}\varepsilon = \overbrace{{}^{\mathbb{L}}\overparen{\mathbb{1}{:}0}}\right) \subset \mathbb{1}\overset{\sharp}{\times}0
$$

$$
\mathbb{1}\overset{\sharp}{\times}\mathbb{K} = \left(\mathbb{1}\overset{\sharp}{\times}0\right) \cup \infty
$$

$$
{}^{\infty}\overparen{\mathbb{1}{:}\lambda} = \lambda \text{ stet lin}
$$

$$
{}^{\infty}\overparen{\mathbb{1}{:}\lambda\acute{\mathbb{1}}{:}\acute{\lambda}} = {}^{\infty}\overparen{\mathbb{1}\acute{\mathbb{1}}+\lambda\acute{\mathbb{1}}+\mathbb{1}\acute{\lambda}{:}\lambda\acute{\lambda}} = \lambda\,\acute{\lambda} = {}^{\infty}\overparen{\mathbb{1}{:}\lambda}\;{}^{\infty}\overparen{\acute{\mathbb{1}}{:}\acute{\lambda}}
$$

$$
{}^{\infty}e = {}^{\infty}\overparen{0{:}1} = 1 \Longrightarrow \infty\in\mathbb{1}\overset{\sharp}{\times}\mathbb{K}
$$

$$
{}^{\infty}\overparen{\mathbb{1}{:}0} = 0 \Longrightarrow \infty \not\ni \mathbb{1}\overset{\sharp}{\times}0
$$

$$
\mathbb{L}\in\mathbb{1}\overset{\sharp}{\times}\mathbb{K}
$$

$$
{}^{\mathbb{L}}\overparen{\mathbb{1}{:}0} = 0 \Longrightarrow {}^{\mathbb{L}}\overparen{\mathbb{1}{:}\lambda} = {}^{\mathbb{L}}\overparen{\mathbb{1}{:}0+\lambda e} = {}^{\mathbb{L}}\overparen{\mathbb{1}{:}0} + \lambda\,{}^{\mathbb{L}}e = \lambda \Longrightarrow \mathbb{L} = \infty
$$

$$\mathbb{1}\overset{\sharp}{\times}0 \xrightarrow[w^* \text{ isom}]{i^\sharp} \mathbb{1}^\sharp \in \triangle^{\omega}_{0} \text{ mit 1-pkt cpt } \mathbb{1}\overset{\sharp}{\times}\mathbb{K}$$

$$i^\sharp\, w^* \text{ stet}$$

$$^{\mathbb{1}\overset{\sharp}{\times}0}i^\sharp \subset \mathbb{1}^\sharp$$

$$i^\sharp \text{ inj } \Leftarrow {}^{\infty}(0{:}1) = 1$$

$$\mathbb{L} \in \mathbb{1}^\sharp \Rightarrow {}^{\tilde{\mathbb{L}}}\overbrace{\mathbb{1}{:}\lambda} := {}^{\mathbb{L}}\mathbb{1} + \lambda \Rightarrow {}^{\tilde{\mathbb{L}}}\overbrace{\mathbb{1}{:}\lambda\acute{\mathbb{1}}{:}\acute{\lambda}} = {}^{\tilde{\mathbb{L}}}\overbrace{\mathbb{1}\acute{\mathbb{1}} + \mathbb{1}\acute{\lambda} + \lambda\acute{\mathbb{1}}{:}\lambda\acute{\lambda}} =$$

$${}^{\mathbb{L}}\overbrace{\mathbb{1}\acute{\mathbb{1}} + \mathbb{1}\acute{\lambda} + \lambda\acute{\mathbb{1}}} + \lambda\acute{\lambda} = {}^{\mathbb{L}}\mathbb{1}\,{}^{\mathbb{L}}\acute{\mathbb{1}} + {}^{\mathbb{L}}\mathbb{1}\,\acute{\lambda} + \lambda\,{}^{\mathbb{L}}\acute{\mathbb{1}} + \lambda\acute{\lambda} = \underbrace{{}^{\mathbb{L}}\mathbb{1} + \lambda}\underbrace{{}^{\mathbb{L}}\acute{\mathbb{1}} + \acute{\lambda}} = {}^{\tilde{\mathbb{L}}}\overbrace{\mathbb{1}{:}\lambda}\;{}^{\tilde{\mathbb{L}}}\overbrace{\acute{\mathbb{1}}{:}\acute{\lambda}} \Rightarrow \tilde{\mathbb{L}} \in \mathbb{1}\overset{\sharp}{\times}0$$

$${}^{\tilde{\mathbb{L}}}i^\sharp = \mathbb{L} \Rightarrow i^\sharp \text{ surj}$$

$${}^{\tilde{\mathbb{L}}}i^\sharp + \varepsilon\mathbb{1}\overset{\sharp}{\times}0_{\mathbb{1}_1:\lambda_1\cdots\mathbb{1}_n:\lambda_n} = \mathbb{L} + \varepsilon\,\mathbb{1}^\sharp_{\mathbb{1}_1\cdots\mathbb{1}_n} \Leftarrow$$

$$\underbrace{\mathbb{\reflectbox{Γ}} - \tilde{\mathbb{L}}}\,\mathbb{1}_j{:}\lambda_j = {}^{\mathbb{\reflectbox{Γ}}}\overbrace{\mathbb{1}_j{:}0} - {}^{\tilde{\mathbb{L}}}\overbrace{\mathbb{1}_j{:}0} + \lambda_j - \lambda_j = \underbrace{i^\sharp\mathbb{\reflectbox{Γ}} - \mathbb{L}}\,\mathbb{1}_j \Rightarrow i^\sharp\, w^* \text{ homeo}$$