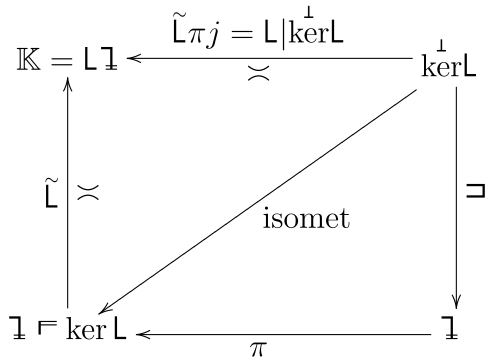
$$\mathrm{HilbR}\ ⅂ \in \overset{2}{\underset{0}{◹}}\mathbb{K}$$

$$\bar{⅂} \in \mathbb{K}\overset{2}{\underset{0}{◺}}\ \mathrm{coHilb}$$

$$\mathbb{K}\underset{0}{◹}⅂ \ \big\downarrow \asymp \ \bar{⅂}$$

$$\mathbb{K}\underset{0}{◹}⅂ \ni \mathsf{L} \sqcap \underbrace{\overset{\perp}{\ker}\mathsf{L}}\ \overbrace{\mathsf{L}\underbrace{\overset{\perp}{\ker}\mathsf{L}}}^{*} \in \bar{⅂}$$

$$\mathbb{K} \xleftarrow[\text{lin stet}]{\mathsf{L}} ⅂ \Longrightarrow \ker\mathsf{L} \sqsubset ⅂ \sqsupset \overset{\perp}{\ker}\mathsf{L}$$



$$\Longrightarrow \dim_{\mathbb{K}} \overset{\perp}{\ker}\mathsf{L} = 1 \Longrightarrow \overset{\perp}{\ker}\mathsf{L} = \underbrace{\overset{\perp}{\ker}\mathsf{L}}\mathbb{K}$$

$$\overset{\perp}{\ker}\mathsf{L} \ni \underbrace{\overset{\perp}{\ker}\mathsf{L}}$$

$$\underbrace{\overset{\perp}{\ker}\mathsf{L}} \bowtie \underbrace{\overset{\perp}{\ker}\mathsf{L}} = 1$$

$$\mathsf{L} = \underbrace{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\overbrace{\mathsf{L}\,\underline{\overset{\perp}{\ker\mathsf{L}}}}^{*}}\,\Join = \mathsf{L}\,\underline{\overset{\perp}{\ker\mathsf{L}}}\,\overbrace{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\Join}$$

$$\daleth = \underbrace{\ker\mathsf{L}}\times\underbrace{\overset{\perp}{\ker\mathsf{L}}} = \underbrace{\ker\mathsf{L}}\times\underline{\overset{\perp}{\ker\mathsf{L}}}\,\mathbb{K} \ni \underset{\in\ker\mathsf{L}}{\mathsf{1}} + \underline{\overset{\perp}{\ker\mathsf{L}}}\,\alpha$$

$$\Rightarrow \overbrace{\mathsf{L}\,\underline{\overset{\perp}{\ker\mathsf{L}}}}\,\underbrace{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\Join\,\overbrace{\mathsf{1} + \underline{\overset{\perp}{\ker\mathsf{L}}}\,\alpha}} = \overbrace{\mathsf{L}\,\underline{\overset{\perp}{\ker\mathsf{L}}}}\,\overbrace{\frac{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\Join\,\mathsf{1}}{2}(=0) + \frac{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\Join\,\underline{\overset{\perp}{\ker\mathsf{L}}}}{2}(=1)\,\alpha}$$

$$= \overbrace{\mathsf{L}\,\underline{\overset{\perp}{\ker\mathsf{L}}}}\,\alpha = \frac{\mathsf{L}\mathsf{1}}{2}(=0) + \mathsf{L}\,\overbrace{\underline{\overset{\perp}{\ker\mathsf{L}}}\,\alpha} = \mathsf{L}\,\overbrace{\mathsf{1} + \underline{\overset{\perp}{\ker\mathsf{L}}}\,\alpha}$$