$$\mathbb{R} \mathop{\overline{\triangledown}}_{0} \overbrace{\hbar^{0} \mathop{\triangle}_{0} \mathbb{R}} \longrightarrow \bar{\mathbb{R}}_{+} \mathop{\triangledown}_{-0} \hbar$$

$$\mathbb{R} \xrightarrow[\text{pos lin}]{\llcorner} {}^{\hbar}\underset{0}{\overset{0}{\triangle}}\mathbb{R} \Rightarrow \llcorner_O := \bigvee_{0 \leqslant \daleth \leqslant 1_O} \llcorner\daleth \Rightarrow \bar{\mathbb{R}}_+ \xleftarrow[\text{top semipremeas}]{\llcorner} {}^{\hbar}\underset{0}{\overset{\sim}{\triangle}}2$$

$\llcorner$ isoton

$$O \Subset \hbar \Rightarrow \begin{cases} \bigvee g \in {}^{\hbar}\underset{0}{\overset{0}{\triangle}}0|1 \\ 1 \underset{\bar{O}}{=} g \end{cases} \quad 0 \leqslant \daleth \leqslant 1_O \Rightarrow \daleth \leqslant g \underset{\llcorner \text{ pos}}{\Rightarrow} \llcorner\daleth \leqslant \llcorner g \Rightarrow \llcorner_O \leqslant \llcorner g < \infty$$

$$\begin{cases} \dot{O} \text{ disj} \\ 0 \leqslant \dot{\daleth} \leqslant 1_{\dot{O}} \end{cases} \Rightarrow 0 \leqslant \daleth + \acute{\daleth} \leqslant 1_O + 1_{\acute{O}} = 1_{O \cup \acute{O}} \Rightarrow \llcorner\daleth + \llcorner\acute{\daleth} = \llcorner\underbrace{\daleth + \acute{\daleth}} \leqslant \llcorner_{O \cup \acute{O}} \Rightarrow \llcorner_O + \llcorner_{\acute{O}} \leqslant \llcorner_{O \cup \acute{O}}$$

$$0 \leqslant \daleth \leqslant 1_{\bigcup_i^{\mathbb{N}} O_i} \Rightarrow \bigvee_{\text{fin } N \subset \mathbb{N}} \daleth \leqslant 1_{\bigcup_i^N O_i} \underset{\text{PRO}}{\Rightarrow} \bigwedge_j^N \bigvee 0 \leqslant \varphi_j \leqslant 1_{O_j} = \sum_j^N \varphi_j | \text{ Trg } \daleth$$

$$\Rightarrow \daleth = \sum_j^N \daleth\varphi_j \Rightarrow \llcorner\daleth = \sum_j^N \llcorner\widehat{\daleth\varphi_j} \leqslant \sum_j^N \llcorner_{O_j} \leqslant \sum_i^N \llcorner_{O_i} \geqslant \llcorner_{\bigcup_i^{\mathbb{N}} O_i}$$

$$0 \leqslant \daleth \leqslant 1_O \Rightarrow \bigvee_{V \Subset O} \text{Trg } \daleth \subset V \Rightarrow \llcorner\daleth \leqslant \llcorner_V \Rightarrow \llcorner_O \leqslant \bigvee_{V \Subset O} \llcorner_V$$

$$0 \leqslant \daleth \leqslant 1: \bigvee_{O \Subset \hbar} \text{Trg } \daleth \subset O \bigwedge_{0 \leqslant k \leqslant n+1} O_k = \begin{cases} \mathfrak{h} \in O \\ {}^{\mathfrak{h}}\daleth n > k-1 \end{cases} \Rightarrow \varnothing = O_{n+1} \Subset O_k \Subset O_0 = O$$

$$\daleth_k = (n\daleth - k)\, 1_{O_k \llcorner O_{k+1}} + 1_{O_k} = \begin{cases} 1 & \hat{O}_{k+1} \\ n\daleth - k + 1 & \hat{O}_k \llcorner O_{k+1} \\ 0 & \hbar \llcorner O_k \end{cases} \in {}^{\hbar}\underset{0}{\overset{0}{\triangle}}0|1 \Leftarrow n\daleth = j \text{ on } \partial O_{j+1}$$

$$\daleth_k | O_{k+1} = 1 \Rightarrow \bigwedge 0 \leqslant \acute{\daleth} \leqslant O_{k+1} \Rightarrow \llcorner_{O_{k+1}} \leqslant \llcorner\daleth_k \leqslant \llcorner_{O_{k-1}} \Leftarrow \text{ Trg } \daleth_k \subset \hat{O}_k \subset O_{k-1}$$

$$1_{O_{k+1}} \leqslant \daleth_k \Rightarrow \llcorner_{O_{k+1}} \leqslant \int_{\llcorner}^{\hbar} \daleth_k \leqslant \llcorner_{O_k} \Leftarrow \daleth_k \leqslant 1_{O_k} \Rightarrow -\llcorner_{O_k} \leqslant -\int_{\llcorner}^{\hbar} \daleth_k \leqslant -\llcorner_{O_{k+1}} \underset{1 \leqslant k \leqslant n}{\overset{\text{add}}{\Rightarrow}}$$

$$-\llcorner_{O_1} \leqslant \sum_{1 \leqslant k \leqslant n} \overbrace{\llcorner\daleth_k - \int_{\llcorner}^{\hbar} \daleth_k} \leqslant \llcorner_{O_0} + \llcorner_{O_1} \sum_{1 \leqslant k \leqslant n} \daleth_k = n\daleth \Rightarrow -\frac{1}{n}\llcorner_{O_1} \leqslant \llcorner\daleth - \int_{\llcorner}^{\hbar} \daleth \leqslant \frac{\llcorner_{O_0} + \llcorner_{O_1}}{n} \underset{n \rightsquigarrow \infty}{\Rightarrow} \llcorner\daleth = \int_{\llcorner}^{\hbar} \daleth$$

$$\daleth = \daleth_+ - \daleth_- \Rightarrow \llcorner\daleth = \ulcorner\daleth_+\urcorner \llcorner \frac{\daleth_+}{\ulcorner\daleth_+\urcorner} - \ulcorner\daleth_-\urcorner \llcorner \frac{\daleth_-}{\ulcorner\daleth_-\urcorner} = \ulcorner\daleth_+\urcorner \int_{\llcorner}^{\hbar} \frac{\daleth_+}{\ulcorner\daleth_+\urcorner} - \ulcorner\daleth_-\urcorner \int_{\llcorner}^{\hbar} \frac{\daleth_-}{\ulcorner\daleth_-\urcorner} = \int_{\llcorner}^{\hbar} \daleth_+ - \int_{\llcorner}^{\hbar} \daleth_- = \int_{\llcorner}^{\hbar} \daleth$$