$$\mathbb{C} \supset \hbar \supset K \text{ cpt} \implies \overset{\text{polygon 1-cycle}}{\bigvee_{\llcorner \subset \hbar \llcorner K}} \bigwedge \eta \in {}^{\hbar}\underset{\omega}{\searrow}\mathbb{C} \bigwedge_{z}^{K} {}^{z}\eta = \int\limits_{dw/2\pi i}^{\llcorner} \frac{{}^{w}\eta}{w - z}$$

$$\bigvee_{\varepsilon > 0} U = K + \underline{\mathbb{C}}\varepsilon = \bigcup_{w}^{K} \overline{w + \underline{\mathbb{C}}\varepsilon} \subsetneq \hbar \implies \overline{U \underset{\bullet}{-} \partial\hbar} > 0 \implies \bigvee_{\delta > 0} \sqrt{2}\delta < \overline{U \underset{\bullet}{-} \partial\hbar} = \overline{U \underset{\bullet}{-} \mathbb{C}\llcorner\hbar}$$

$$\text{Gitter } M = \bigcup_{i:j \in \mathbb{Z}} \underbrace{i\delta\times\mathbb{R}}_{\text{horiz}} \cup \underbrace{\mathbb{R}\times j\delta}_{\text{vert}} \subset \mathbb{R}^2 = \mathbb{C}$$

$$\bar{U} \text{ bes} \implies \text{fin } \mathcal{Q} = \begin{cases} Q \subset \mathbb{C}\llcorner M \text{ comp} \\ \bar{U} \cap \bar{Q} \neq \varnothing \end{cases}$$

$$\bigcup_{Q}^{\mathcal{Q}} \bar{Q} \subset \hbar \impliedby \bigwedge_{Q}^{\mathcal{Q}} z \in \bar{Q} \implies \overline{\bar{U} \underset{\bullet}{-} z} \underset{\text{dist monoton}}{\leqslant} \overline{\bar{U} \cap \bar{Q} - z} \underset{\underset{\bar{U} \cap \bar{Q} \neq \varnothing}{\bullet}}{\leqslant} \sqrt{2}\delta < \overline{U \underset{\bullet}{-} \mathbb{C}\llcorner\hbar} \implies z \in \hbar$$

$$\mathcal{S} = \big\{ \underset{\text{endl viele}}{\upharpoonleft \text{ oriented edge of } Q \in \mathcal{Q}} \big\} \supset \mathcal{S}' = \frac{\upharpoonleft \in \mathcal{S}}{-\upharpoonleft \notin \mathcal{S}} \text{ belongs to unique } Q \in \mathcal{Q} \implies \llcorner = \sum_{\upharpoonleft}^{\mathcal{S}'} \upharpoonleft \text{ 1-chain}$$

$$\text{Spur } \llcorner^{=} = \bigcup_{\upharpoonleft}^{\mathcal{S}'} \upharpoonleft^{=} \subset \hbar\llcorner\bar{U} \subset \hbar\llcorner K \impliedby \bigwedge_{\upharpoonleft}^{\mathcal{S}} \bar{U} \cap \upharpoonleft^{=} \neq \varnothing \implies \bar{U} \text{ meets two } Q \in \mathcal{Q} \text{ with edge } \upharpoonleft \notin \mathcal{S}'$$

$$\upharpoonleft \in \mathcal{S}\llcorner\mathcal{S}' \implies -\upharpoonleft \in \mathcal{S}\llcorner\mathcal{S}' \implies \sum_{\upharpoonleft}^{\mathcal{S}\llcorner\mathcal{S}'} \upharpoonleft = 0 \text{ 1-chain} \implies \llcorner = \sum_{\upharpoonleft}^{\mathcal{S}'} \upharpoonleft + \sum_{\upharpoonleft}^{\mathcal{S}\llcorner\mathcal{S}'} \upharpoonleft = \sum_{\upharpoonleft}^{\mathcal{S}} \upharpoonleft = \sum_{Q}^{\mathcal{Q}} \partial Q$$

$$\llcorner \in \underset{1}{\mathbb{Z}}\blacktriangleleft\hbar \text{ null-hlg} \impliedby \bigcup_{Q}^{\mathcal{Q}} \partial Q \subset \bigcup_{Q}^{\mathcal{Q}} \bar{Q} \subset \hbar \implies N = \mathbb{C} \ni \bigcup_{Q}^{\mathcal{Q}} \partial Q \subset \mathbb{C}\llcorner\hbar$$

$$\bigwedge_{z}^{N} \deg_{z} \llcorner = \sum_{Q}^{\mathcal{Q}} \deg_{z} \partial Q \implies \begin{cases} \overset{\mathbb{C}\llcorner\hbar \subset N}{\bigwedge_{z}} \overset{\mathcal{Q}}{\bigwedge_{Q}} z \notin Q \implies \deg_{z}\partial Q = 0 \implies \deg_{z}\llcorner = 0 \\ \overset{\bar{U}\llcorner M \subset N}{\bigwedge_{z}} \deg_{z}\llcorner = 1 \impliedby Q_{z} = \overline{\mathbb{C}\underset{z}{\llcorner}M} \implies \bar{Q}_{z} \cap \bar{U} \neq \varnothing \implies Q_{z} \in \mathcal{Q} \end{cases}$$

$$\bigwedge_{Q}^{\mathcal{Q}} \deg_{z} \partial Q = \begin{cases} 0 & Q \neq Q_{z} \\ 1 & Q = Q_{z} \end{cases} \implies \deg_{z}\llcorner = \deg_{z}\partial Q_{z} = 1$$

$$\underset{\text{CIF}}{\implies} \overset{\bar{U}\llcorner M}{\bigwedge_{z}} {}^{z}\eta = \int\limits_{dw/2\pi i}^{\llcorner} \frac{{}^{w}\eta}{w - z} \underset{\underset{\text{hull}}{U\llcorner M \subsetneq U}}{\overset{\text{both sides stet in } z \in U}{\implies}} \overset{U \supset K}{\bigwedge_{z}} {}^{z}\eta = \int\limits_{dw/2\pi i}^{\llcorner} \frac{{}^{w}\eta}{w - z}$$