

$$\mathbb{R} \in \mathcal{I} \Rightarrow \overline{\mathfrak{h}\mathfrak{q} - \mathfrak{h}\mathfrak{r}} \leq \overline{\mathfrak{q} - \mathfrak{r}} \geq \overline{\mathfrak{h}\mathfrak{r} - \mathfrak{h}\mathfrak{q}}$$

$$\bigwedge_{\mathfrak{h}} -M \leq \mathfrak{h}\mathfrak{q} - \mathfrak{h}\mathfrak{r} \leq M = \overline{\mathfrak{q} - \mathfrak{r}}$$

$$\Rightarrow \mathfrak{h}\mathfrak{r} - M \leq \mathfrak{h}\mathfrak{q} - M \leq \mathfrak{h}\mathfrak{q} \leq \mathfrak{h}\mathfrak{q} + M \leq \mathfrak{h}\mathfrak{r} + M$$

$$\Rightarrow \mathfrak{h}\mathfrak{r} - M \leq \mathfrak{h}\mathfrak{r} \leq \mathfrak{h}\mathfrak{q} \leq \mathfrak{h}\mathfrak{r} + M$$

$$\Rightarrow \mathfrak{h}\mathfrak{r} - \mathfrak{h}\mathfrak{r} \leq M \geq \mathfrak{h}\mathfrak{q} - \mathfrak{h}\mathfrak{q}$$

$$\text{analog } \mathfrak{h}\mathfrak{r} - \mathfrak{h}\mathfrak{q} \leq M = \overline{\mathfrak{r} - \mathfrak{q}} \geq \mathfrak{h}\mathfrak{r} - \mathfrak{h}\mathfrak{q}$$

$$\left\{ \begin{array}{l} \mathbb{I}_{\mathbb{I}}^{\infty} \mathbb{R} \ni \mathcal{V}^n \text{ integrable} \\ \mathcal{V}^n \underset{\text{glm}}{\approx} \gamma \in \mathbb{I}_{\mathbb{I}}^{\infty} \mathbb{R} \end{array} \right\} \Rightarrow \left\{ \begin{array}{l} \gamma \text{ integrable} \\ \int^{\hbar} \mathcal{V}^n \rightsquigarrow \int^{\hbar} \gamma \end{array} \right.$$

$$\overline{\int^{\hbar} \mathcal{V}^n - \int^{\hbar} \mathcal{V}^m} \leq |\hbar| \overline{\mathcal{V}^n - \mathcal{V}^m} \xrightarrow{\text{Cau}} \mathbb{R} \ni \int^{\hbar} \mathcal{V}^n \rightsquigarrow S \in \mathbb{R}$$

$$\mathcal{I} \succ (\varepsilon)^{\hbar} \Rightarrow \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]}$$

$$\sum_{\pm}^{\mathcal{I}} \gamma - \sum_{\pm}^{\mathcal{I}} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} = \sum_I^{\mathcal{I}} \overline{\mathcal{T} \left\{ \gamma - \int^{\hbar} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} \right\}} \leq \overline{\mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} - \gamma} \sum_I^{\mathcal{I}} \overline{\mathcal{T}} \leq \varepsilon$$

$\underbrace{\sum_I^{\mathcal{I}} \overline{\mathcal{T}}}_{=|\hbar|}$

$$\begin{aligned} \sum_{+}^{\mathcal{I}} \gamma - 3\varepsilon &\leq \sum_{+}^{\mathcal{I}} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} - 2\varepsilon \leq \int^{\hbar} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} - \varepsilon \leq S \\ &\leq \int^{\hbar} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} + \varepsilon \leq \sum_{-}^{\mathcal{I}} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]} + 2\varepsilon \leq \sum_{-}^{\mathcal{I}} \gamma + 3\varepsilon \end{aligned}$$

$$\Rightarrow \gamma \text{ integrable} \wedge \int^{\hbar} \gamma = S = \lim \int^{\hbar} \mathcal{V}^{[\varepsilon/|\hbar|; \mathcal{V}; \hbar] \gamma [\varepsilon; \int^{\hbar} \mathcal{V}]}$$

$$\mathbb{I}_{\mathbb{I}}^{\infty} \mathbb{R} \underset{\text{abg}}{\supset} \mathbb{I}_{\mathbb{I}}^{\infty} \mathbb{R} \xrightarrow[\text{stet}]{\int^{\hbar}} \mathbb{R}$$