$$\mathbb{H}\underset{\omega}{\triangle}^{2}\mathbb{C} \underset{\mathcal{P}}{\overset{\sqsubset}{\rightleftarrows}} \mathbb{H}\underset{m}{\triangle}^{2}\mathbb{C}$$

$$\mathbb{H}\underset{\omega}{\triangle}^{2}\mathbb{C} \ni 1_n \text{ ONB } \Rightarrow \sum_n 1_n \, 1_n^{\dagger} \eta = \eta$$

$${}^{z}\mathcal{P}_{w} \backsim \sum_n {}^{z}1_n \, {}^{w^*}1_n \text{ cpt conv } \mathbb{H}\times\mathbb{H}$$

$$\bigwedge \eta \in \mathbb{H}\underset{\omega}{\triangle}\mathbb{C} \curvearrowright {}^{z}\eta = \int_{dw/\pi}^{\mathbb{H}} {}^{z}\mathcal{P}_{w} \, {}^{w}\eta$$

$$\int_{dw/\pi}^{\mathbb{H}} {}^{z}\mathcal{P}_{w} \, {}^{w}\eta = \int_{dw/\pi}^{\mathbb{H}} \sum_n {}^{z}1_n \, {}^{w^*}1_n^{\dagger} \, {}^{w}\eta = \sum_n {}^{z}1_n \int_{dw/\pi}^{\mathbb{H}} {}^{w^*}1_n^{\dagger} \, {}^{w}\eta = \sum_n {}^{z}1_n \, 1_n^{\dagger} \eta = {}^{z}\overbrace{\sum_n 1_n 1_n^{\dagger} \eta} = {}^{z}\eta$$