

$$\text{HilbR } \mathbb{1} \in \mathbb{K}^{\mathbb{1}}_0$$

$$\mathbb{K}^{\mathbb{1}}_0$$



$$\mathbb{1}$$

$$\bigwedge_{\mathbb{1}} \mathbb{L} \in \mathbb{K}^{\mathbb{1}}_0 \quad \bigvee_{\mathbb{1}} \text{ sind } \bigwedge_{\mathbb{1}} \mathbb{L} \mathbb{1} = \mathbb{1} \mathbb{1}$$

$$\bigvee_{\text{ONB}} S \subset \mathbb{1}$$

$$\bigwedge_{T \subset S}^{\text{fin}} \sum_s^T \overline{\mathbb{L}_s}^2 = \sum_s^T \underbrace{\mathbb{L}_s \widehat{\mathbb{L}_s^*}}_{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*}} \leq \overline{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*}} = \overline{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*} \star \sum_t^T \widehat{\mathbb{L}_t^*}} = \overline{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*}^2} \stackrel{1/2}{=} \overline{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*}^2} \stackrel{1/2}{=} \overline{\mathbb{L} \sum_s^T \widehat{\mathbb{L}_s^*}^2}$$

$$\Rightarrow \sum_s^T \overline{\mathbb{L}_s}^2 \leq \overline{\mathbb{L}^2} \geq \sum_s^S \overline{\mathbb{L}_s}^2 \stackrel{\text{voll}}{\Rightarrow} \bigvee \mathbb{1} \ni 1 = \sum_s^S \widehat{\mathbb{L}_s^*}$$

$$\bigwedge_{\mathbb{1}} \mathbb{1} \mathbb{1} = \sum_s^S \underbrace{\widehat{\mathbb{L}_s^*} \star \mathbb{1}}_{\mathbb{L}_s \star \mathbb{1}} = \sum_s^S \underbrace{\mathbb{L}_s \star \mathbb{1}}_{\mathbb{L}_s \star \mathbb{1}} \stackrel{\text{lin}}{\text{stet}} \mathbb{L} \sum_s^S \star \mathbb{1} = \mathbb{L} \mathbb{1}$$