



$T_e \mathbf{G} \equiv \text{Lie } \mathbf{G}$
 Lie algebra of
 the Lie Group \mathbf{G}

$$\mathbf{G}_{\text{Lie}} \leqslant \text{GL}(n, \mathbb{C}) \subseteq \text{Mat}(n, \mathbb{C})$$