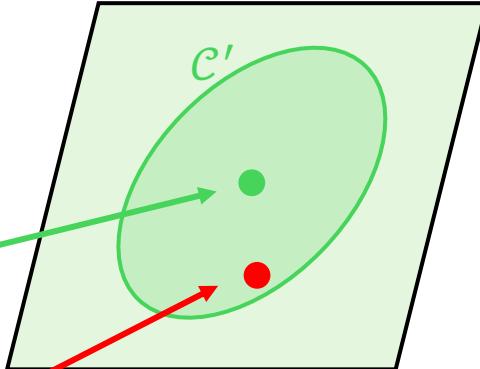
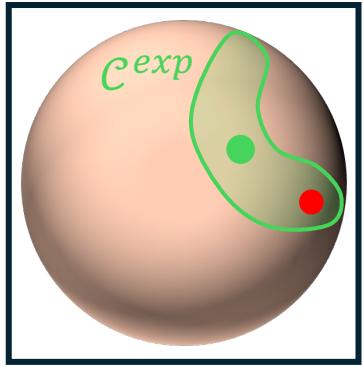


Lie Algebra

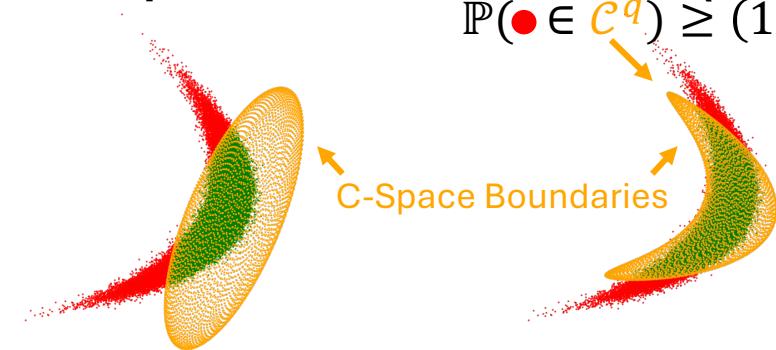


$$\mathbb{P}(\bullet \in \mathcal{C}') \geq (1 - \alpha)$$

Lie Group



State-Space EKF + CP



CLAPS (ours)

$$\mathbb{P}(\bullet \in \mathcal{C}^q) \geq (1 - \alpha)$$

More Efficient

$$\mathbb{P}(\bullet \in \mathcal{C}^{\text{exp}}) \geq (1 - \alpha)$$