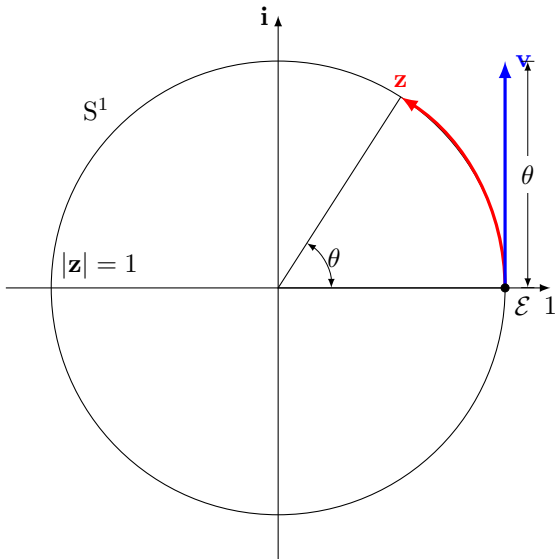


S^1 : The unit complex numbers



Action:

rotate

Constraint:

Multiple operator: Lie group!

Topology:

unit circle S^1

Elements

$\mathbf{z} = \cos(\theta) + \mathbf{i} \sin(\theta)$

Inverse:

\mathbf{z}^*

Composition:

$\mathbf{z}_1 \cdot \mathbf{z}_2$