

from trigonometry import sin, cos

$$x(\theta, \phi) = \begin{bmatrix} R \cos(\theta) \cos(\phi) \\ R \sin(\theta) \cos(\phi) \\ R \sin(\phi) \end{bmatrix}$$

where

- $\phi \in \mathbb{R}$  :angle between 0 and  $2\pi$
- $\theta \in \mathbb{R}$  :angle between  $-\pi/2$  and  $\pi/2$
- $R \in \mathbb{R}$  :the radius of the sphere