

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