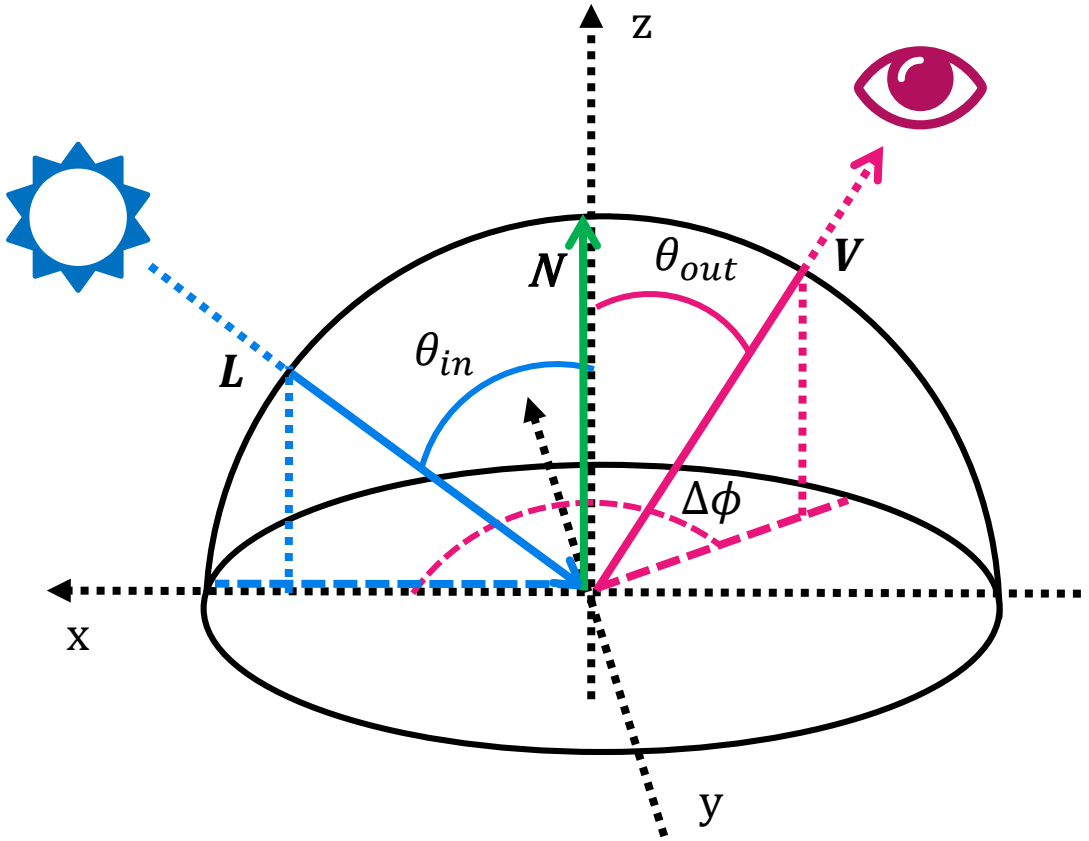
光線と座標系（等方性BRDF ）

Isotropic BRDF / Coordinate axis & Ray vector



$\mathrm{Angle}(\theta, \phi) \rightarrow \mathrm{Vector}(X, Y, Z)$

$X = \cos\phi \sin\theta \qquad 0 \leq \theta \leq \pi/2$
$Y = \sin\phi \sin\theta \qquad 0 \leq \phi \leq 2\pi$
$Z = \cos\theta \qquad 0 \leq X, Y, Z \leq 1$

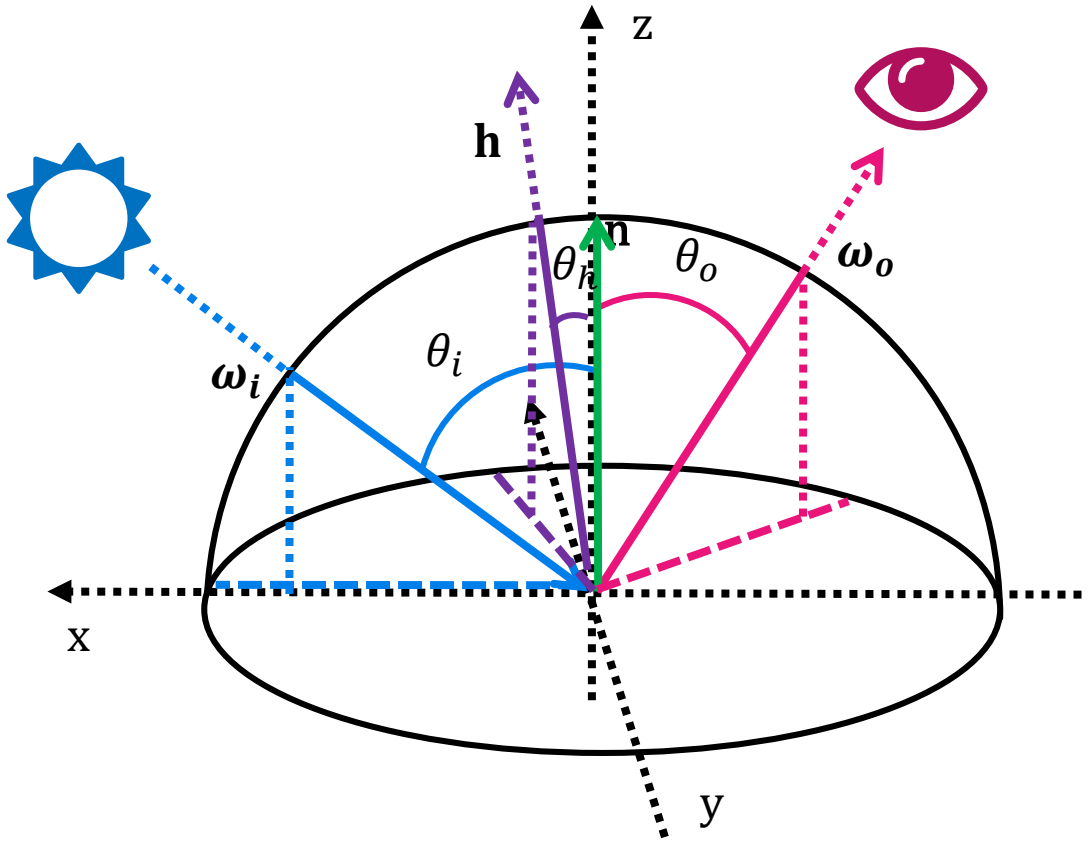
$\boldsymbol{N} = (0, 0, 1)$

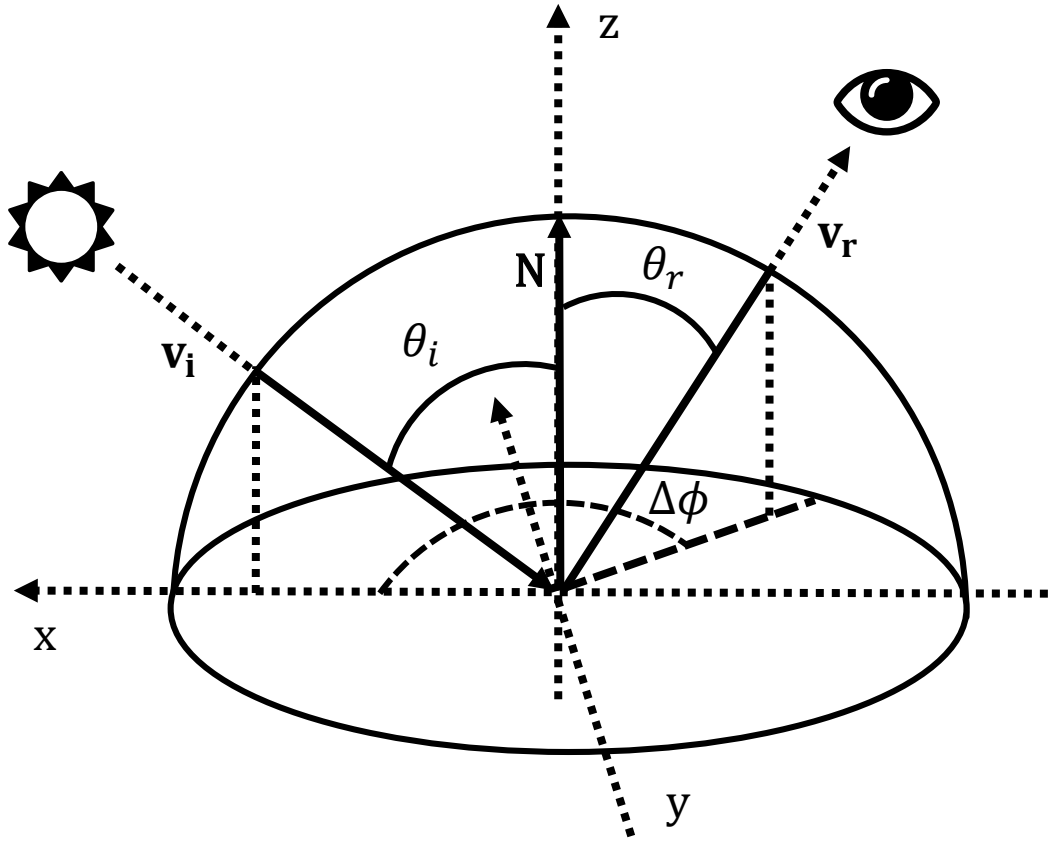
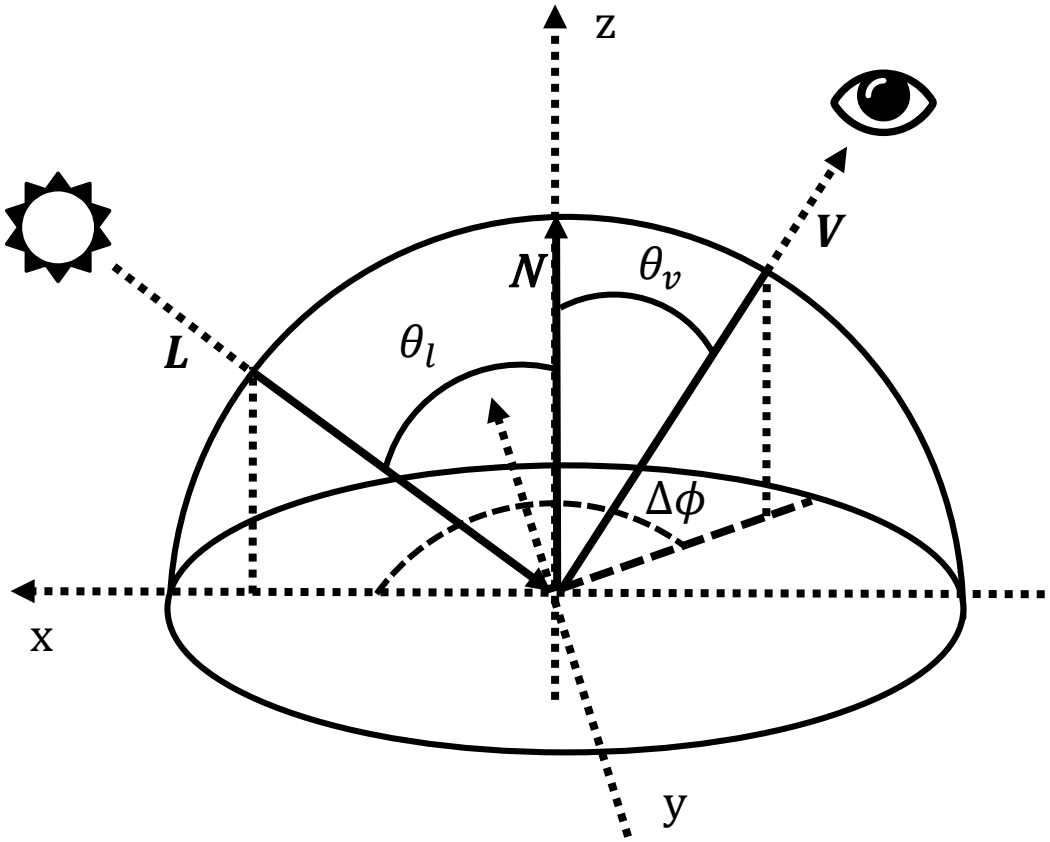
$\boldsymbol{L} = (\sin\theta_{in}, 0, \cos\theta_{in})$

$\boldsymbol{V} = (\cos\Delta\phi \sin\theta_{out}, \sin\Delta\phi \cos\theta_{out}, \cos\theta_{out})$

光線と座標系（等方性BRDF ）

ハーフベクトル追加、記号表記変更



光線と座標系（等方性BRDF ）

Isotropic BRDF / Coordinate axis & Ray vector