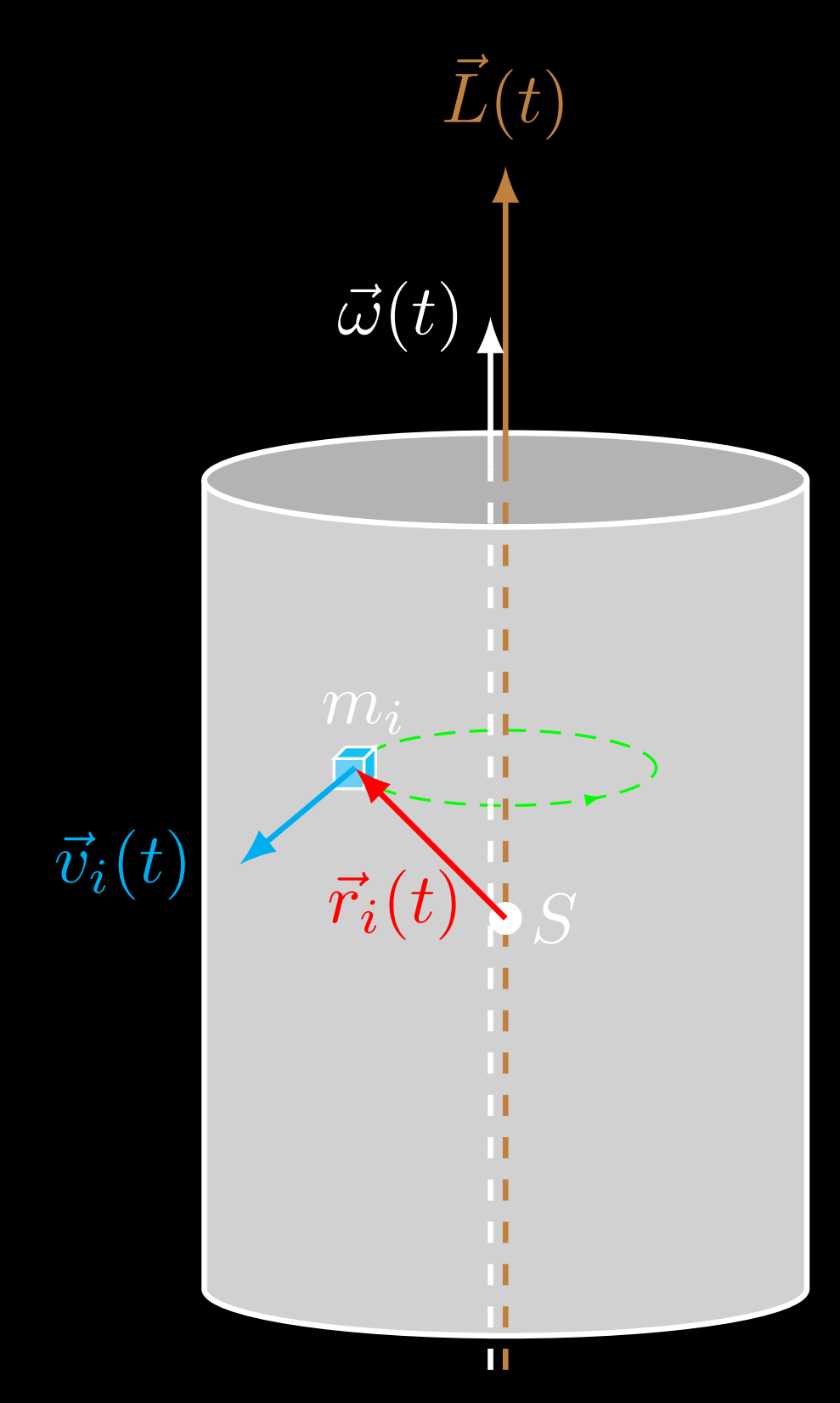
$\vec{L}(t)$
$\vec{\omega}(t)$
m_i
$\vec{v}_i(t)$
$\vec{r}_i(t)$
S