

$\vec{r} = r \cos \theta \hat{e}_r - r \sin \theta \hat{e}_\theta$
 $\vec{v} = \dot{r} \hat{e}_r - r \dot{\theta} \hat{e}_\theta$

$\vec{a} = (\ddot{r} - r \dot{\theta}^2) \hat{e}_r - (2\dot{r}\dot{\theta} + r\ddot{\theta}) \hat{e}_\theta$

OL N **ONOME** **CEQ** **A** **ON**

Yo o n d o o nd o on o o o
 on n o n o o c nc on - o o o
 $\cos \theta = \frac{1}{\sqrt{2}}$

yo o d no on o on $\theta = \frac{\pi}{4}$ yo n
 o o nc on on o
 - o no on y o on - no co n
 $\sin \theta = \frac{1}{\sqrt{2}}$ nd o $\theta = -\frac{\pi}{4}$ o o on - A o co n
 od π o n o on nd dd n π ny n o
 o on - o o on

$$\theta = \pm \frac{\pi}{4} + n\pi$$

Loo n y yo o nd y n
 n o on nd o d o con nc yo no

EXE C E -

yo c nno y o co p

o o n c -

h h