

Office Hours

Hours For HW help:

Wed 11-12 – 254 CB

Fri 12-1 – 392 CB

Normal hours in 435K CTB:

Mon 12:30-2:30

Announcements

- Fellowship Session
- STEM Prep Week

Axis/Angle

- Given vector defined as $k^0 = [k_x, k_y, k_z]$
- Given an angle about that vector θ

see figure 2.12 in the book

Axis/Angle

- Given vector defined as $k^0 = [k_x, k_y, k_z]$
- Given an angle about that vector θ

$$R_{k,\theta} = \begin{bmatrix} k_x^2(1 - c_\theta) + c_\theta & k_x k_y(1 - c_\theta) - k_z s_\theta & k_x k_z(1 - c_\theta) + k_y s_\theta \\ k_x k_y(1 - c_\theta) + k_z s_\theta & k_y^2(1 - c_\theta) + c_\theta & k_y k_z(1 - c_\theta) - k_x s_\theta \\ k_x k_z(1 - c_\theta) - k_y s_\theta & k_y k_z(1 - c_\theta) + k_x s_\theta & k_z^2(1 - c_\theta) + c_\theta \end{bmatrix}$$

- We can also go back the other way from R to get k and theta (see equations in book)