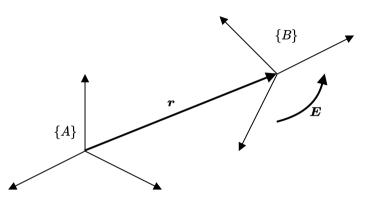
Coordinate Transforms



$$^{B}oldsymbol{X}_{A} = egin{bmatrix} oldsymbol{E} & oldsymbol{0} \ oldsymbol{0} & oldsymbol{E} \end{bmatrix} egin{bmatrix} oldsymbol{1} & oldsymbol{0} \ oldsymbol{ ilde{r}}^{ ext{T}} & oldsymbol{1} \end{bmatrix} \quad ext{where} \quad oldsymbol{ ilde{r}} = egin{bmatrix} 0 & -r_z & r_y \ r_z & 0 & -r_x \ -r_y & r_x & 0 \end{bmatrix}$$