



Wavevector:  $\vec{k}_2 = v_2 \frac{\omega}{c} (\sin \theta_2 \hat{x} - \cos \theta_2 \hat{y} + 0 \hat{z}) \quad k_2 = |\vec{k}_2| = v_2 \frac{\omega}{c}$

Electric field:  $\vec{E}^{(2)} = \vec{A} \exp(i \vec{k}_2 \cdot \vec{r}) = \vec{A} \exp(i k_2 (x \sin \theta_2 - y \cos \theta_2))$