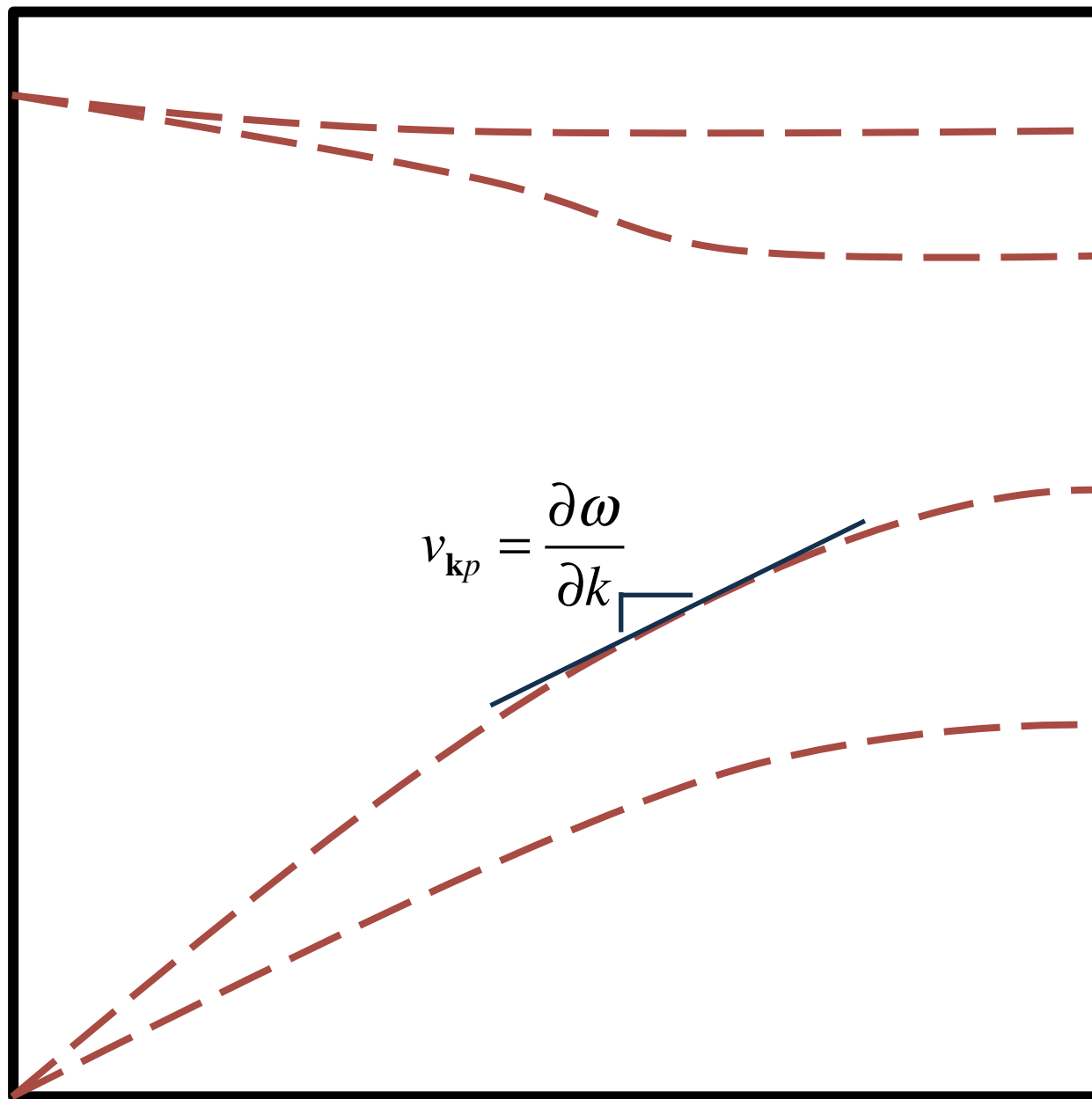
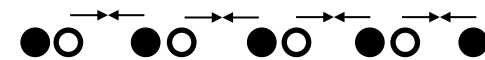


Frequency - ω

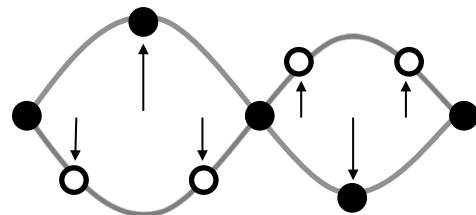


Wavevector - k

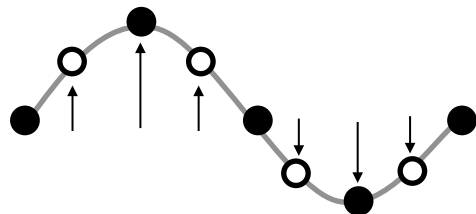
Transverse Optical



Longitudinal Optical



Longitudinal Acoustic



Transverse Acoustic

