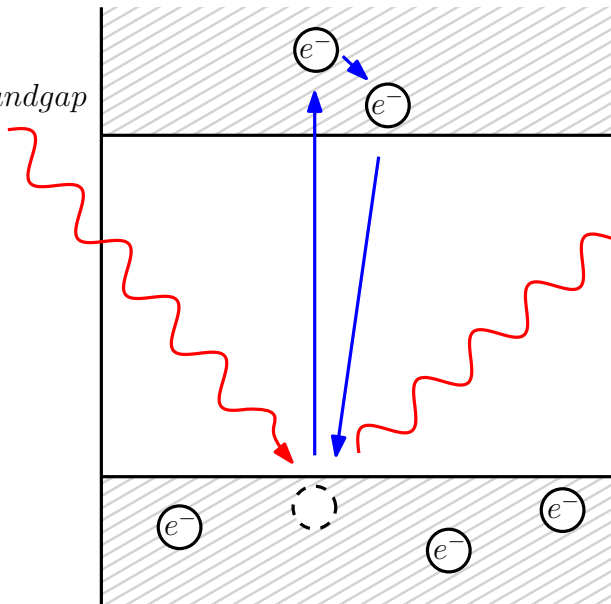


Conduction band

$$hf \geq E_{bandgap}$$



$$hf \approx E_{bandgap}$$

Valence band