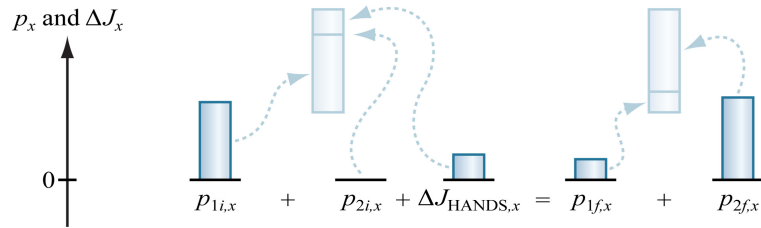
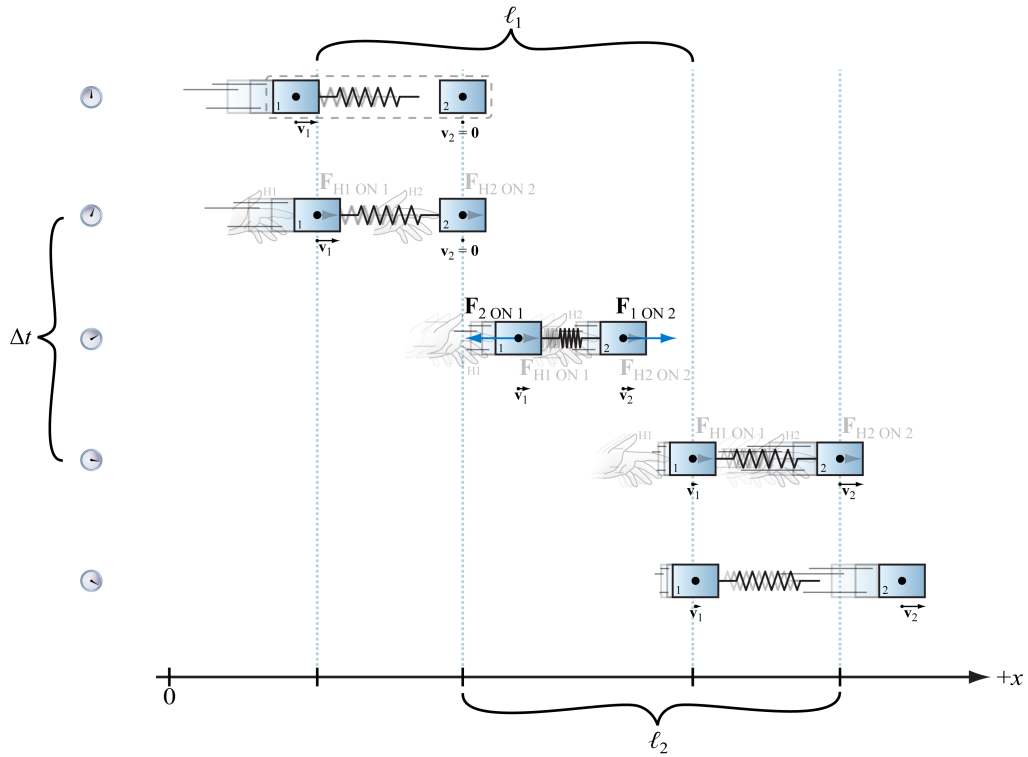
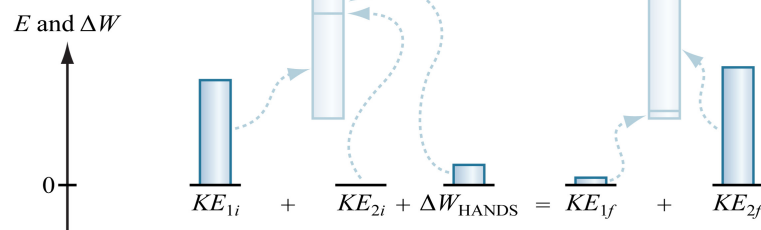


Sums of quantities can be changed by external input



$$\Sigma \vec{P}_i + \overbrace{\sum_{\text{EXT ON SYS}} \Delta \vec{J}_F}^{\Delta \vec{J}_{\Sigma \vec{F}, \text{EXT ON SYS}}} = \Sigma \vec{P}_f$$



$$\overbrace{\Sigma KE_i + \Sigma \dot{U}_{G,i} + \Sigma U_{S,i}}^{\Sigma ME_{\text{SYS},i}} + \sum_{\text{EXT ON SYS}} \Delta W_F = \overbrace{\Sigma KE_f + \Sigma \dot{U}_{G,f} + \Sigma U_{S,f}}^{\Sigma ME_{\text{SYS},f}} + \Sigma \Delta U_{\text{INT}}$$