Parallels between momentum and energy (algebra-based physics)

Impulse and momentum	Work and energy
$\vec{\mathbf{p}} := m\vec{\mathbf{v}}$	$KE := \frac{1}{2}mv^2$
$\Delta\vec{\mathbf{J}}_{\mathrm{F}} := \vec{\mathbf{F}}_{\mathrm{AVG}}\,\Delta t$ $\quad \begin{aligned}\Delta J_{\mathrm{F},x} &= F_{x,\mathrm{AVG}}\,\Delta t \\ \Delta J_{\mathrm{F},y} &= F_{y,\mathrm{AVG}}\,\Delta t\end{aligned}$ $\quad \Delta J_{\mathrm{F},x,y} = $ Signed area under graph of $F_{x,y}$ vs. t	$\begin{aligned}\Delta W_{\mathrm{F}} &:= F_{\parallel,\mathrm{AVG}}\Delta\ell \\ &= (F\cos\theta)_{\mathrm{AVG}}\,\Delta\ell\end{aligned}$ $\quad \Delta W_{\mathrm{F}} = $ Signed area under graph of $F_{\parallel}$ vs. ℓ $\quad \begin{aligned}[W] &= \mathrm{N}\cdot\mathrm{m} \\ &= \mathrm{J}\end{aligned}$
$\vec{\mathbf{p}}_i + \overbrace{\sum_{\mathrm{F}}\Delta\vec{\mathbf{J}}_{\mathrm{F}}}^{\Delta\vec{\mathbf{J}}_{\Sigma\vec{\mathbf{F}}}} = \vec{\mathbf{p}}_f$	$KE_i + \overbrace{\sum_{\mathrm{F}}\Delta W_{\mathrm{F}}}^{\Delta W_{\Sigma\vec{\mathbf{F}}}} = KE_f$
$\vec{\mathbf{F}}_{\mathrm{AVG}} = \frac{\Delta\vec{\mathbf{J}}_{\mathrm{F}}}{\Delta t} = \frac{\Delta\vec{\mathbf{p}}_{\mathrm{F}}}{\Delta t}$	$P_{\mathrm{F,AVG}} := \frac{\Delta W_{\mathrm{F}}}{\Delta t}$ $\quad P_{\mathrm{F}} = (F\cos\theta)v$ $\quad [P] = \frac{\mathrm{J}}{\mathrm{s}} = \mathrm{W}$
	$-\Delta U_{\mathrm{F},1\ldots N} := \Delta W_{\mathrm{F},2\ \mathrm{ON}\ 1} + \Delta W_{\mathrm{F},1\ \mathrm{ON}\ 2} + \cdots + \Delta W_{\mathrm{F},N-1\ \mathrm{ON}\ N}$ $F_{x,\mathrm{AVG}} = -\frac{\Delta U_{\mathrm{F}}}{\Delta x}$ $\quad \Delta U_{\mathrm{G}} = mg\Delta h$ $\quad \Delta U_{\mathrm{S}} = \frac{1}{2}k(\Delta x)^2$
$\Sigma\vec{\mathbf{p}}_i + \overbrace{\sum_{\substack{\mathrm{EXT} \\ \mathrm{ON\ SYS}}}\Delta\vec{\mathbf{J}}_{\mathrm{F}}}^{\Delta\vec{\mathbf{J}}_{\Sigma\vec{\mathbf{F}},\mathrm{EXT\ ON\ SYS}}} = \Sigma\vec{\mathbf{p}}_f$	$\overbrace{\Sigma KE_i + \Sigma U_{\mathrm{G},i} + \Sigma U_{\mathrm{S},i}}^{\Sigma ME_{\mathrm{SYS},i}} + \Sigma\Delta W_{\mathrm{OUF}} = \overbrace{\Sigma KE_f + \Sigma U_{\mathrm{G},f} + \Sigma U_{\mathrm{S},f}}^{\Sigma ME_{\mathrm{SYS},f}} + \Sigma\Delta U_{\mathrm{INT}}$