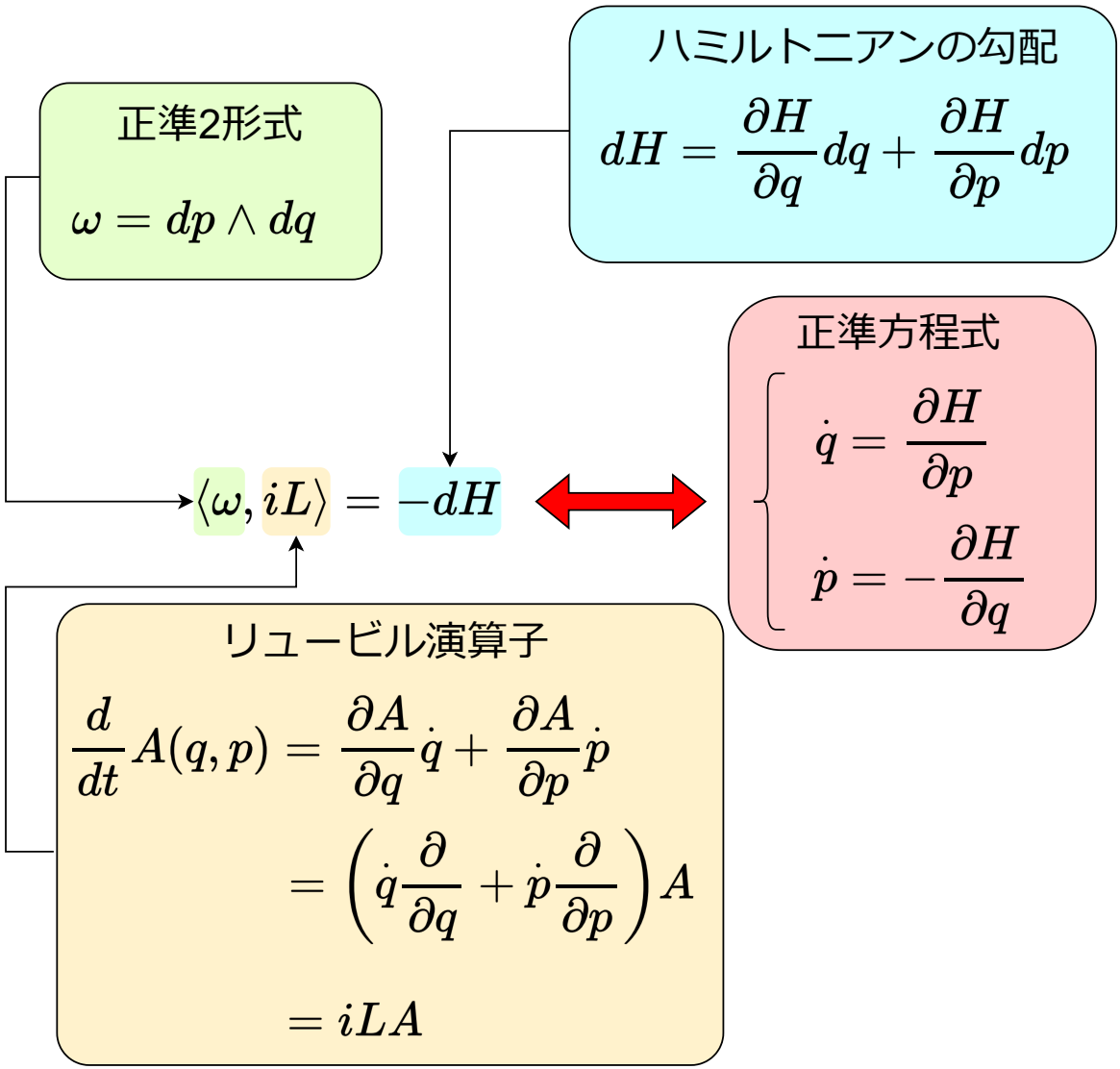
正準2形式
$\omega = dp \wedge dq$
ハミルトニアンの勾配
$dH = \frac{\partial H}{\partial q} dq + \frac{\partial H}{\partial p} dp$
正準方程式
$\dot{q} = \frac{\partial H}{\partial p}$
$\dot{p} = -\frac{\partial H}{\partial q}$
$\langle \omega, iL \rangle = -dH$
リュービル演算子
$\frac{d}{dt} A(q,p) = \frac{\partial A}{\partial q} \dot{q} + \frac{\partial A}{\partial p} \dot{p}$
$= \left(\dot{q} \frac{\partial}{\partial q} + \dot{p} \frac{\partial}{\partial p} \right) A$
$= iLA$