

$$\begin{aligned}
& \underbrace{{}_x + i y}_{\text{J} \times \text{J}} = \int_{d\dot{x}/\dot{x}^2 d\dot{y}} \int_{d\ddot{x}/\ddot{x}^2 d\ddot{y}} \dot{x} + i\dot{y} \text{J} \ddot{x} + i\ddot{y} \text{J} \\
& \exp \left( \frac{(\dot{x}^2 - \ddot{x}^2) y + (\ddot{x}^2 - x^2) \dot{y} + (x^2 - \dot{x}^2) \ddot{y}}{x \dot{x} \ddot{x}} \right) \frac{(x^2 + \dot{x}^2) (x^2 + \ddot{x}^2)}{x^2 \dot{x} \ddot{x}} \\
& \underbrace{{}_e \text{J} \times \text{J}} = \int_{d\dot{x}/\dot{x}^2 d\dot{y}} \int_{d\ddot{x}/\ddot{x}^2 d\ddot{y}} \dot{x} + i\dot{y} \text{J} \ddot{x} + i\ddot{y} \text{J} \exp \left( \frac{(\ddot{x}^2 - 1) \dot{y} + (1 - \dot{x}^2) \ddot{y}}{\dot{x} \ddot{x}} \right) \frac{(1 + \dot{x}^2) (1 + \ddot{x}^2)}{\dot{x} \ddot{x}} \\
& = \int_{d\dot{x}/\dot{x}^2 d\dot{y}} \int_{d\ddot{x}/\ddot{x}^2 d\ddot{y}} \dot{x} + i\dot{y} \text{J} \ddot{x} + i\ddot{y} \text{J} \exp \left( (\ddot{x} - \dot{x}^{-1}) \frac{\dot{y}}{\dot{x}} + (\dot{x}^{-1} - \ddot{x}) \frac{\ddot{y}}{\ddot{x}} \right) (\dot{x}^{-1} + \ddot{x}) (\ddot{x}^{-1} + \dot{x})
\end{aligned}$$