

$$\vartheta^+(\gamma) = \int_0^{\infty} \dot{r} f_r(\gamma, \dot{r}) d\dot{r} \quad (\text{C.9})$$

$$\vartheta^+(\gamma) = \int_0^{\infty} \dot{r} 2\gamma e^{-\gamma^2} \frac{1}{\sqrt{\pi K}} e^{-\frac{\dot{r}^2}{K}} d\dot{r} = \sqrt{\frac{K}{\pi}} \gamma \cdot e^{-\gamma^2} \quad (\text{C.10})$$

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