

$$\int_{d\gamma}^{0|0} \exp \frac{-1}{\hbar} \int_{dt}^{r|s} \left( \frac{m}{2} \dot{\gamma}^2 + mg \dot{\gamma} \right) = \sqrt{\frac{m}{2\pi\hbar(s-r)}}$$

$$r|s \xrightarrow[\text{cl path}]{\gamma} \mathbb{R}: m \int_{dt}^{r|s} \dot{\gamma}^2 + \int_{dt}^{r|s} mg \dot{\gamma}$$

$$\int_{dt}^{r|s} \frac{m}{2} \dot{\gamma}^2 + \int_{dt}^{r|s} mg \dot{\gamma}$$