

$$\begin{aligned}
Gamma &= \frac{\partial^2 V}{\partial S^2} \\
&= \frac{2e^{-wr(T-t)}}{\sigma^2 S^2} \cdot \\
&\quad \left\{ \left(\frac{K}{S} \right)^{\frac{\theta_- + v_-}{\sigma}} N(-\eta e_+) \left[r(1-w) + (r-q) \frac{\theta_- + v_-}{\sigma} \right] \right. \\
&\quad + \left(\frac{K}{S} \right)^{\frac{\theta_- - v_-}{\sigma}} N(\eta e_-) \left[r(1-w) + (r-q) \frac{\theta_- - v_-}{\sigma} \right] \\
&\quad + \eta \left(\frac{K}{S} \right)^{\frac{\theta_- + v_-}{\sigma}} n(e_+) \left[-\frac{e_-}{2(T-t)} + \frac{r-q}{\sigma \sqrt{T-t}} \right] \\
&\quad \left. + \eta \left(\frac{K}{S} \right)^{\frac{\theta_- - v_-}{\sigma}} n(e_-) \left[\frac{e_+}{2(T-t)} + \frac{r-q}{\sigma \sqrt{T-t}} \right] \right\}.
\end{aligned}$$