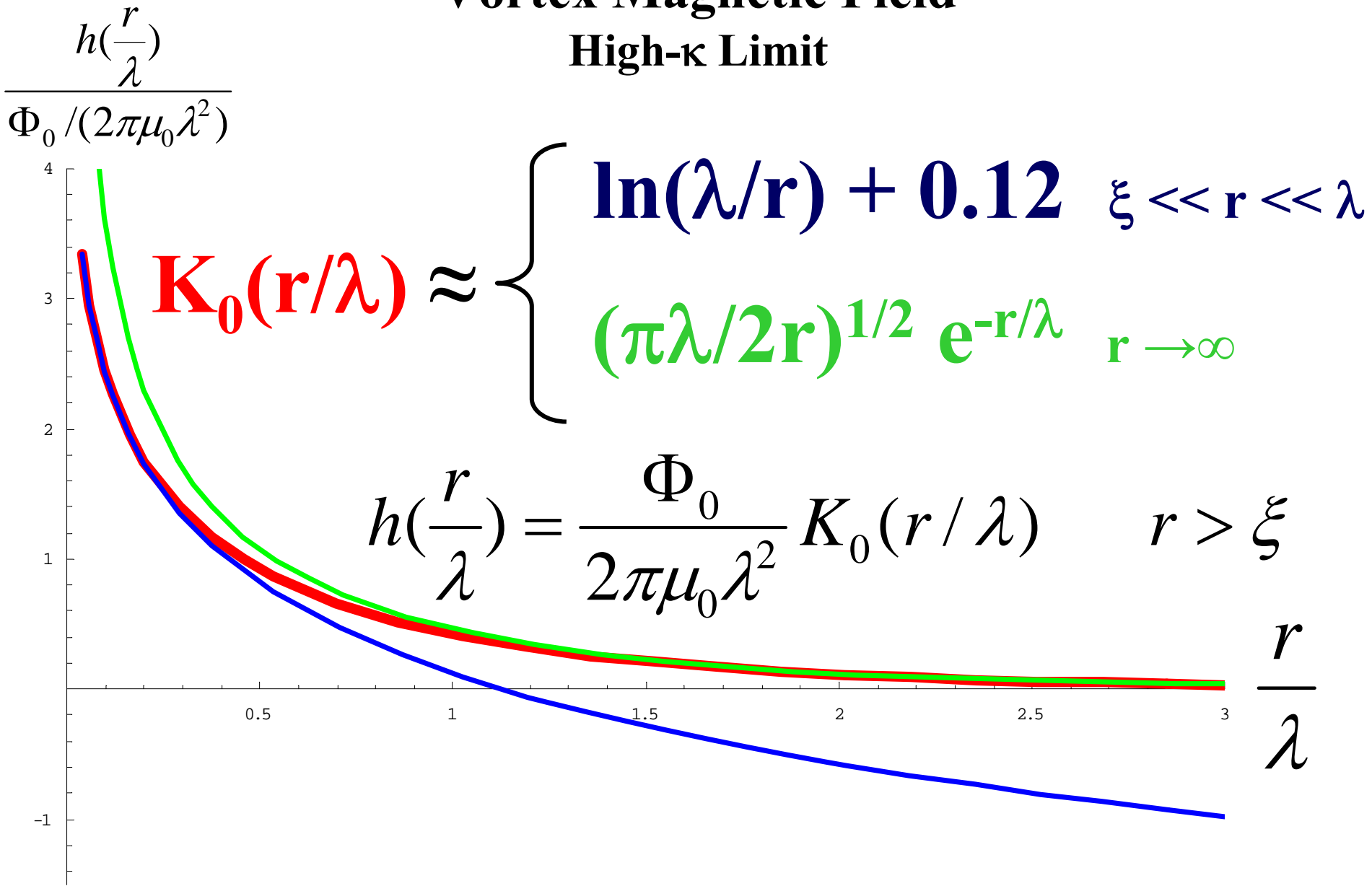


Vortex Magnetic Field

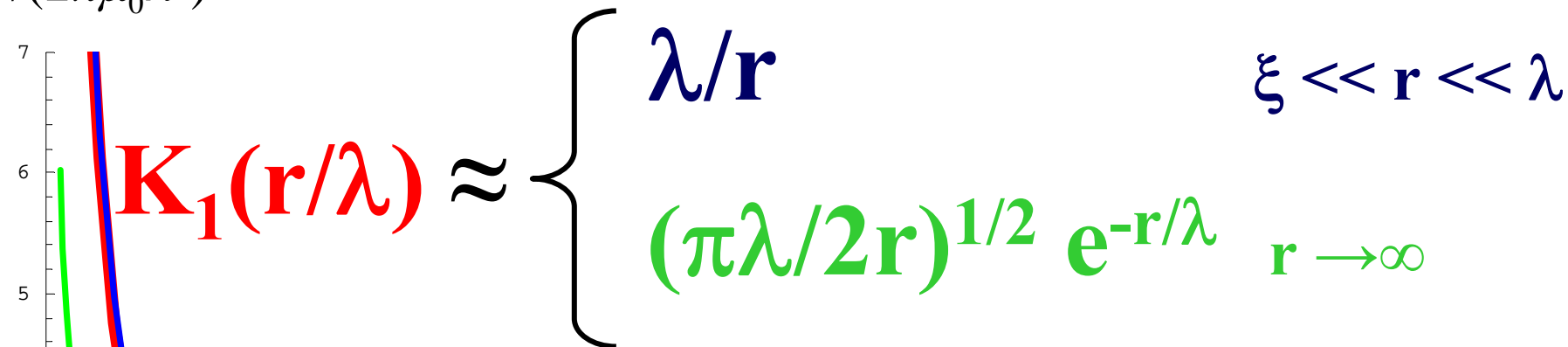
High- κ Limit



Vortex Current High- κ Limit

$$J_{\theta}\left(\frac{r}{\lambda}\right)$$

$$\Phi_0 / (2\pi\mu_0\lambda^3)$$



$$\vec{J}_{\theta}\left(\frac{r}{\lambda}\right) = \frac{\Phi_0}{2\pi\mu_0\lambda^3} K_1(r/\lambda) \hat{\theta} \quad r > \xi$$

