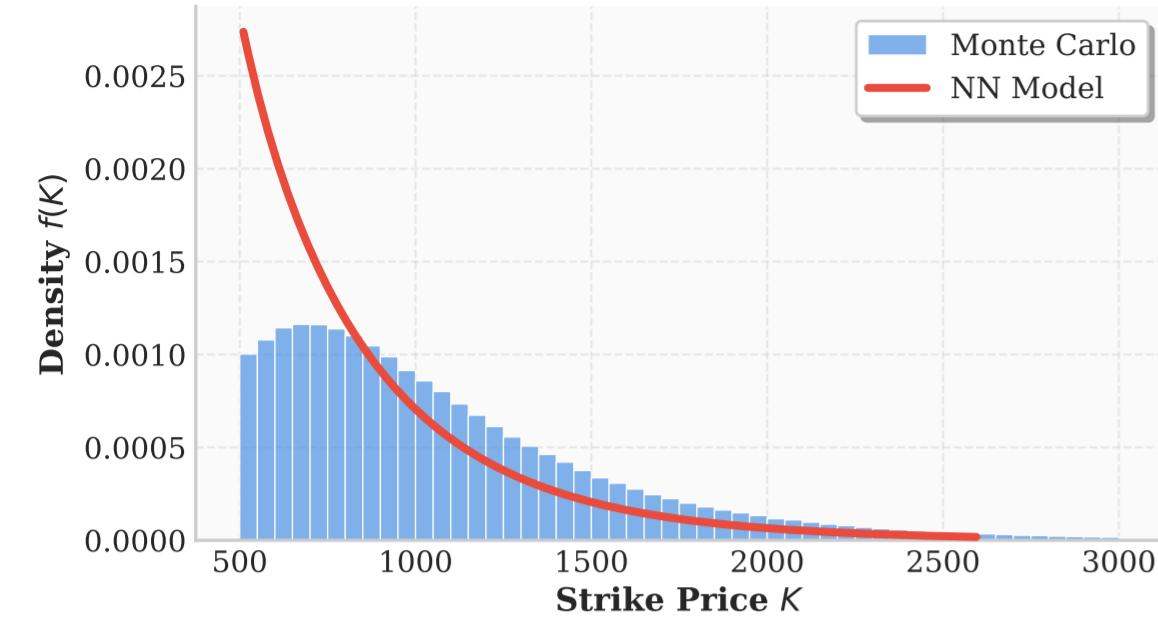


PDF Analysis: Neural Network Synthetic Local Volatility Model

Monte Carlo with $dS_t = rS_t dt + \sigma_{NN}(t, S)S_t dW_t$

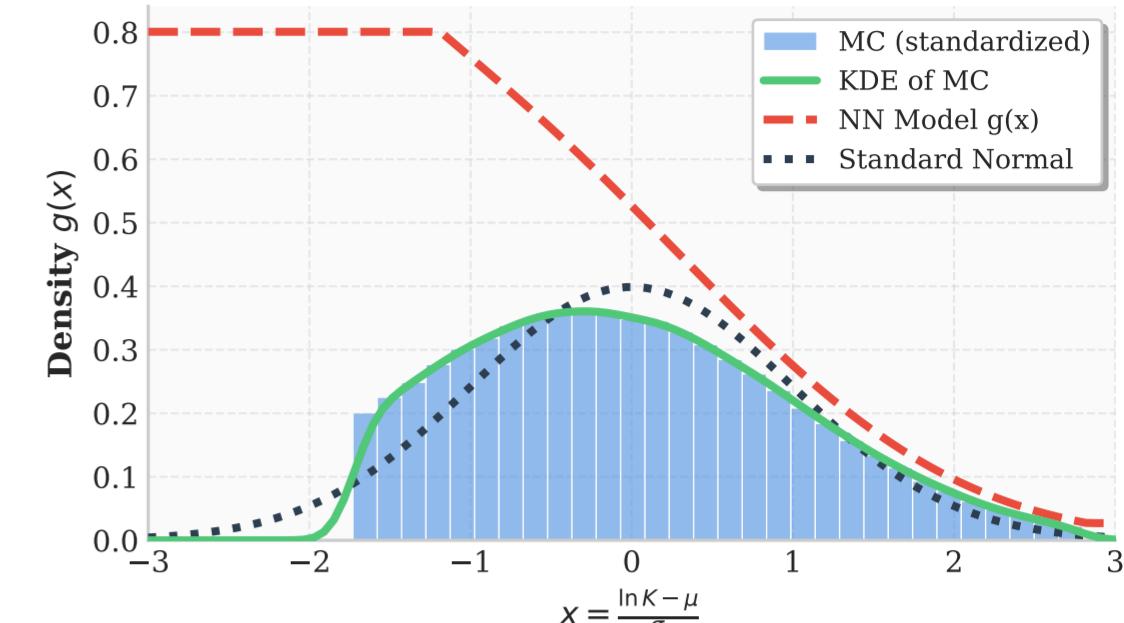
Strike Distribution ($T = 0.25$)



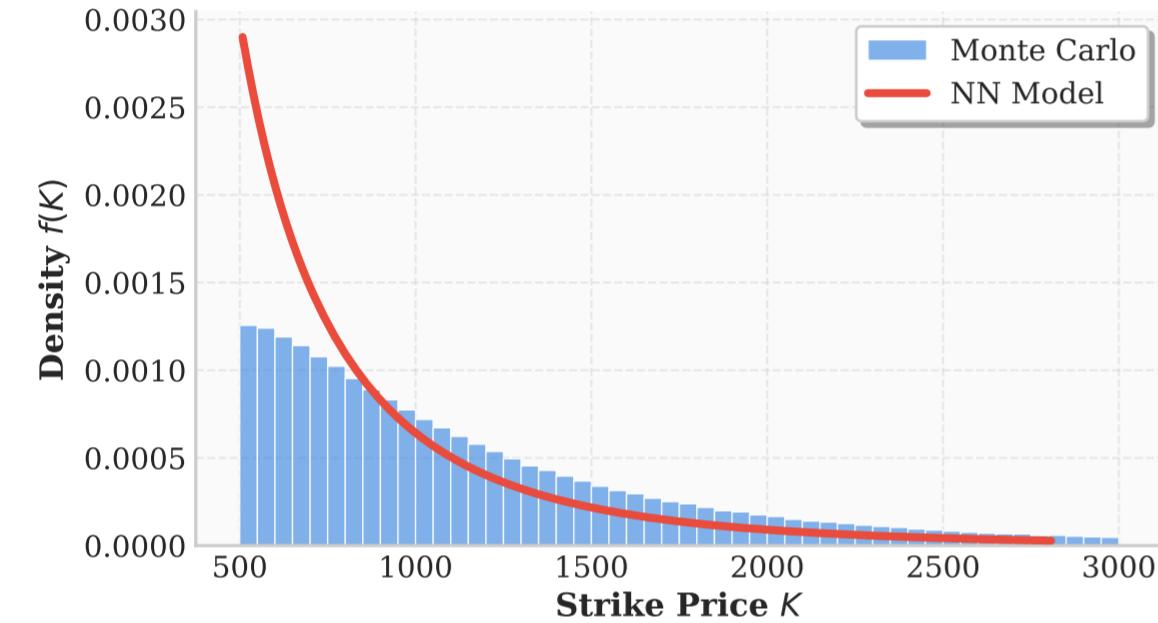
Log-Normal Distribution ($T = 0.25$)



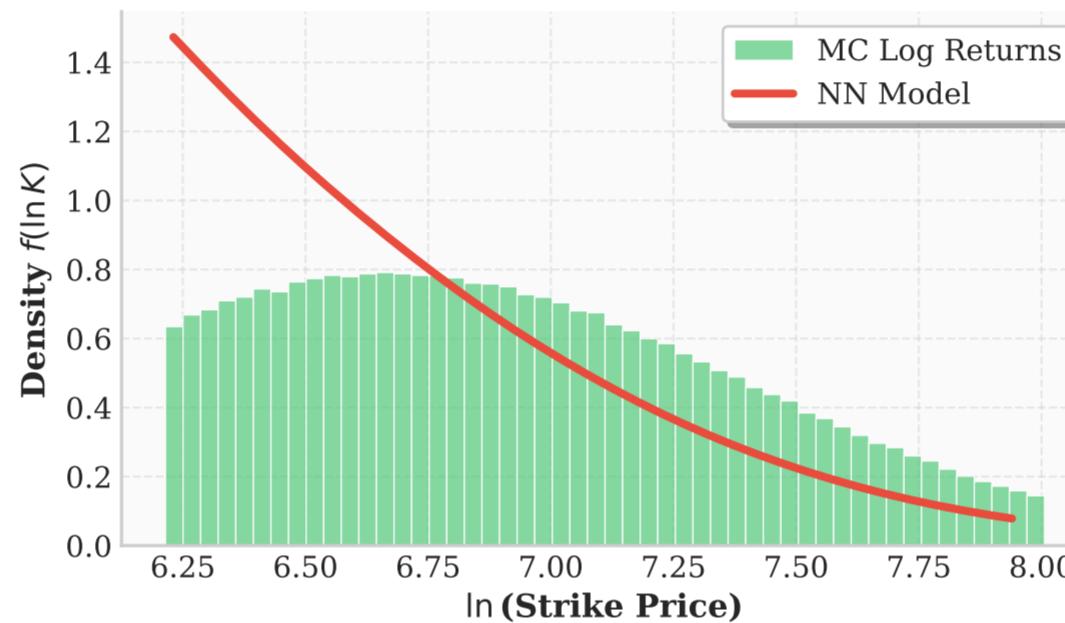
Gaussian Space ($T = 0.25$)
 $\mu = 6.72, \sigma = 0.41$
 Skew=0.38, ExKurt=-0.52



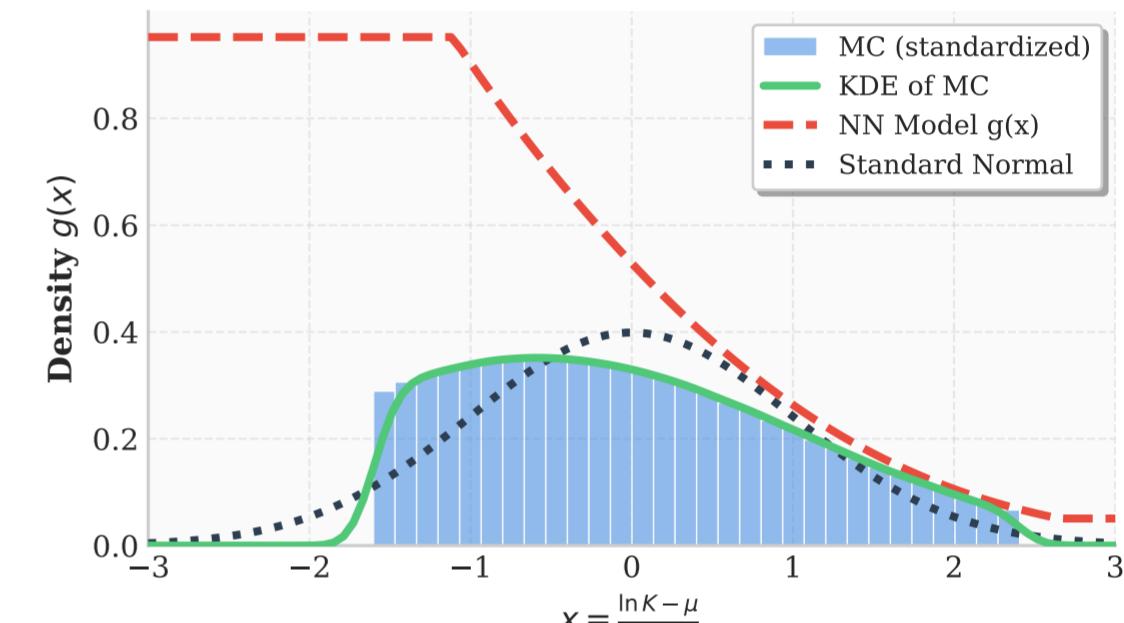
Strike Distribution ($T = 0.50$)



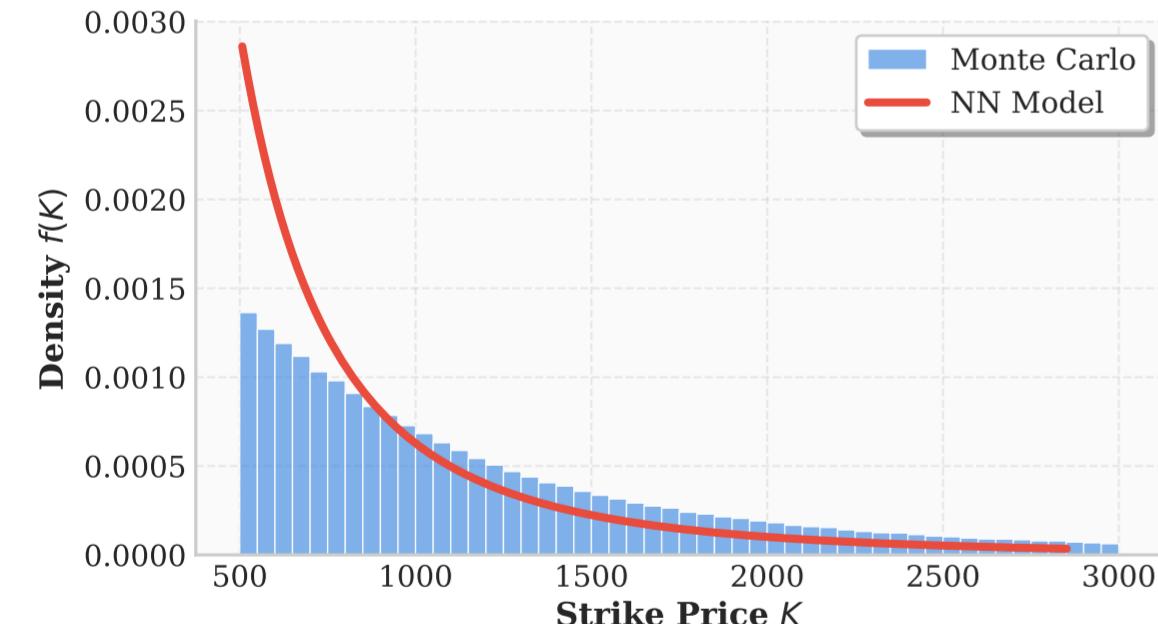
Log-Normal Distribution ($T = 0.50$)



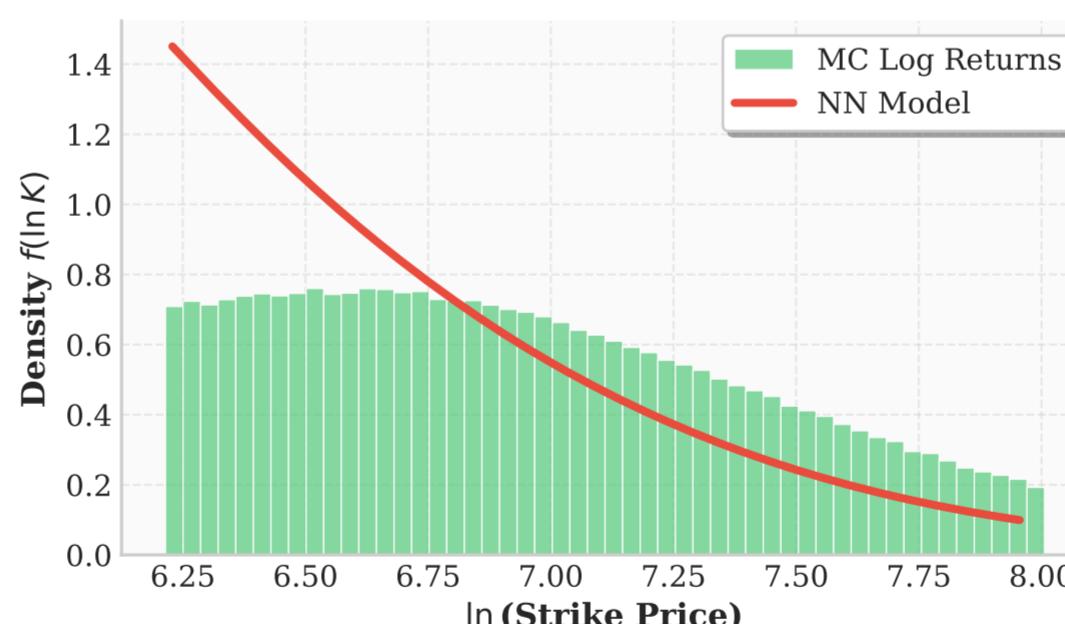
Gaussian Space ($T = 0.50$)
 $\mu = 6.74, \sigma = 0.45$
 Skew=0.38, ExKurt=-0.76



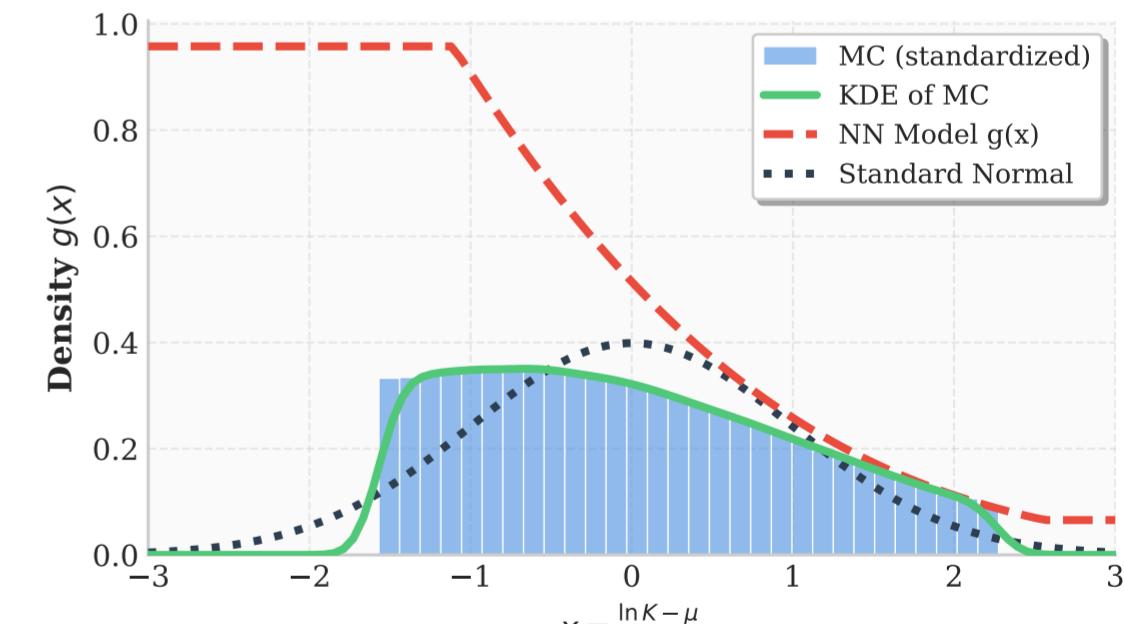
Strike Distribution ($T = 0.75$)



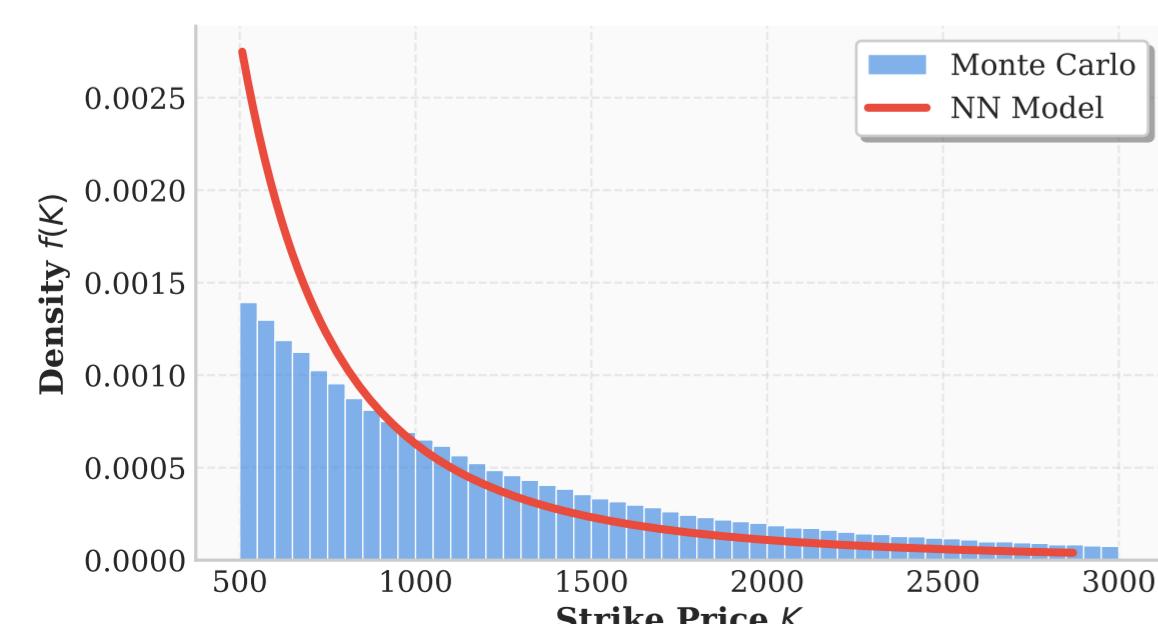
Log-Normal Distribution ($T = 0.75$)



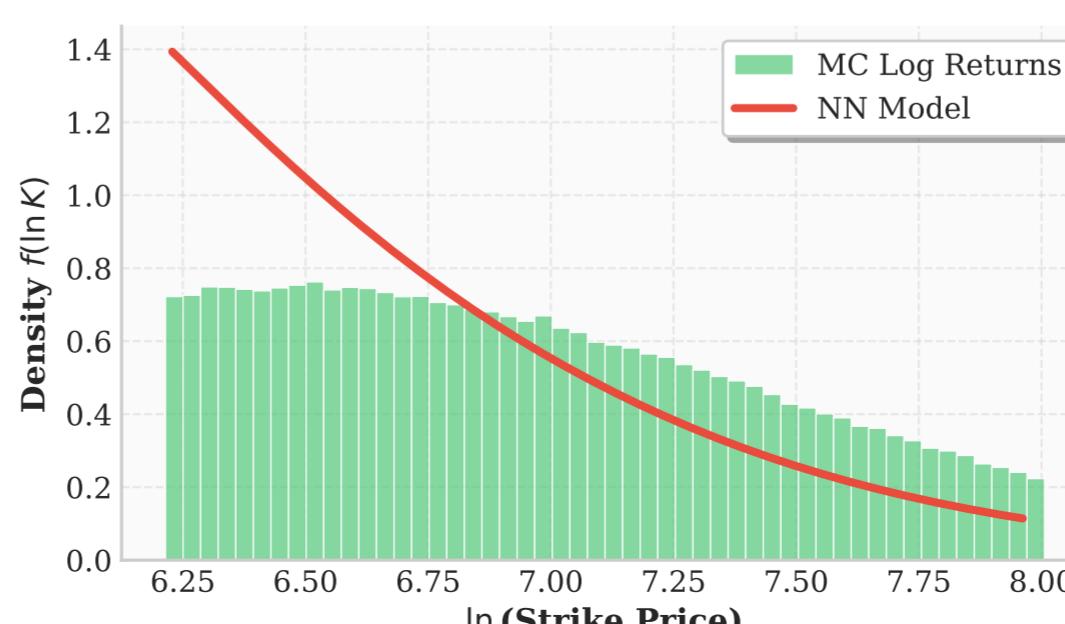
Gaussian Space ($T = 0.75$)
 $\mu = 6.75, \sigma = 0.47$
 Skew=0.36, ExKurt=-0.85



Strike Distribution ($T = 1.00$)



Log-Normal Distribution ($T = 1.00$)



Gaussian Space ($T = 1.00$)
 $\mu = 6.77, \sigma = 0.48$
 Skew=0.35, ExKurt=-0.91

