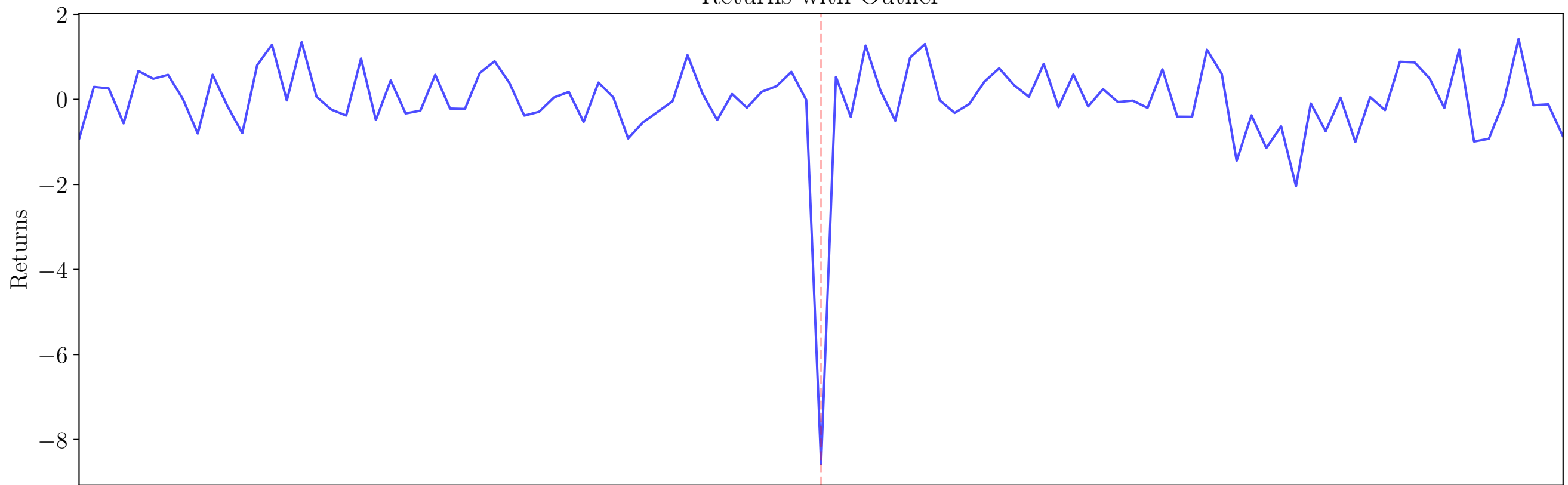Returns with Outlier

Volatility Estimates Near Isolated Outlier

L2 Loss ($\alpha = 2$)
Cauchy Loss ($\alpha = 0$)
$\alpha = 1$
Est. $\alpha = -0.79$
GARCH
β_t GARCH(1,1)
True Volatility