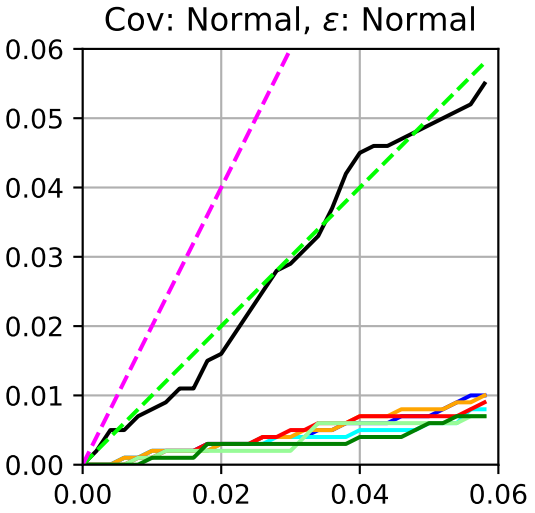
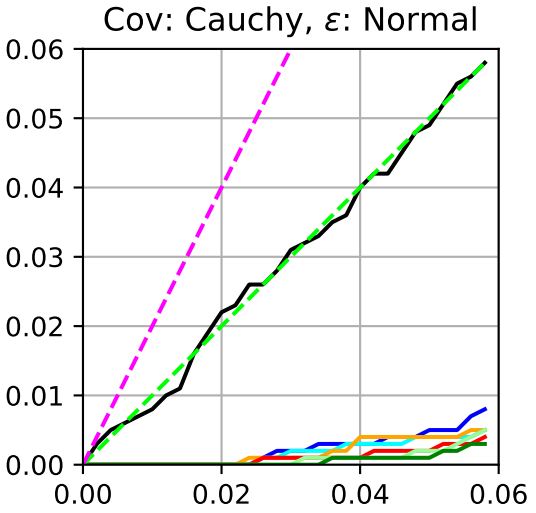
Empirical CDF of p-values under H0, with n = 25, B = 999, p = 6, 1000 runs

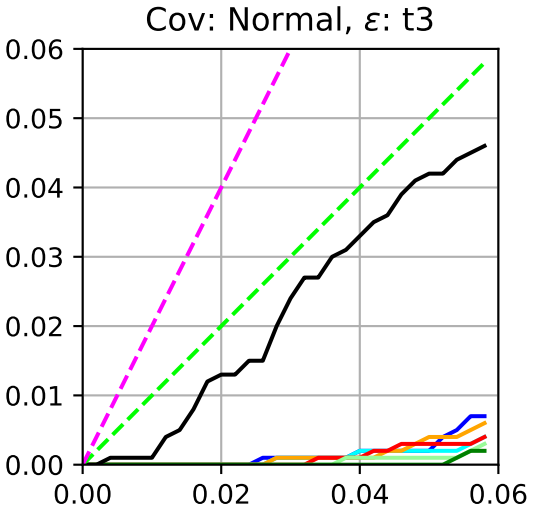
Cov: Normal, $\varepsilon$: Normal



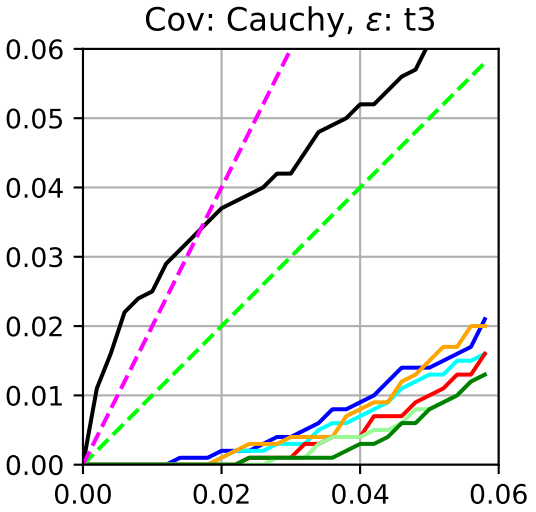

Cov: Cauchy, $\varepsilon$: Normal



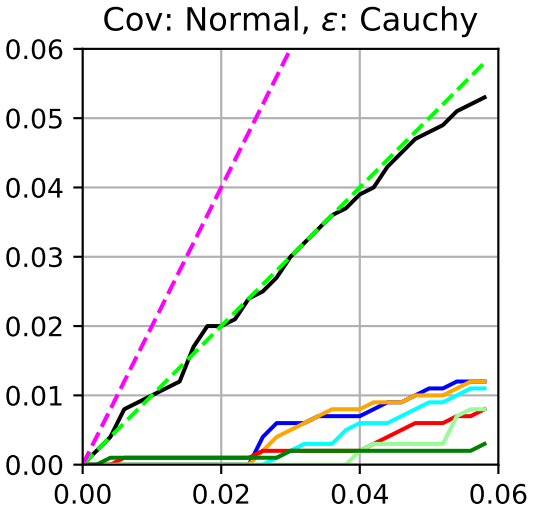

Cov: Normal, $\varepsilon$: t3



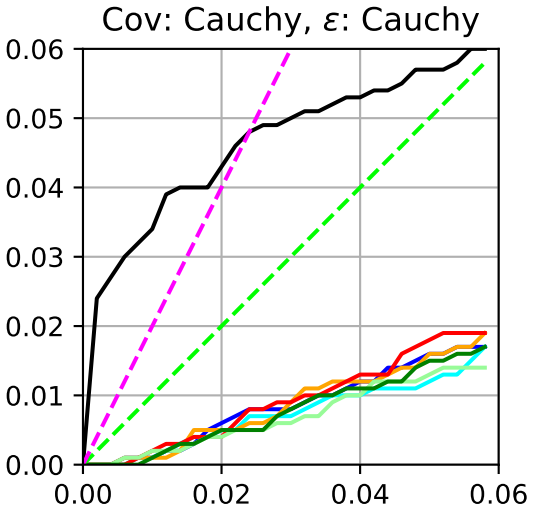

Cov: Cauchy, $\varepsilon$: t3



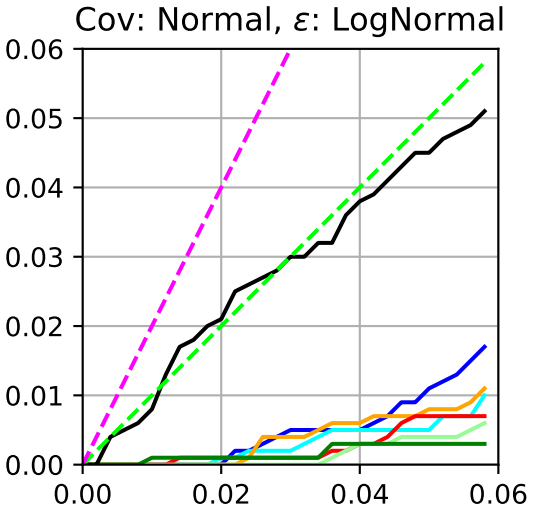

Cov: Normal, $\varepsilon$: Cauchy



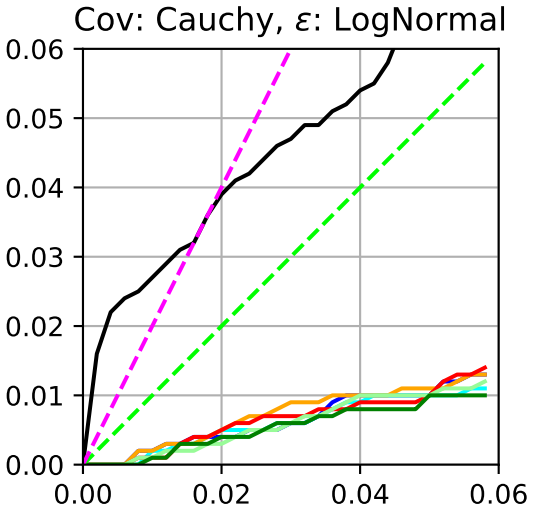

Cov: Cauchy, $\varepsilon$: Cauchy



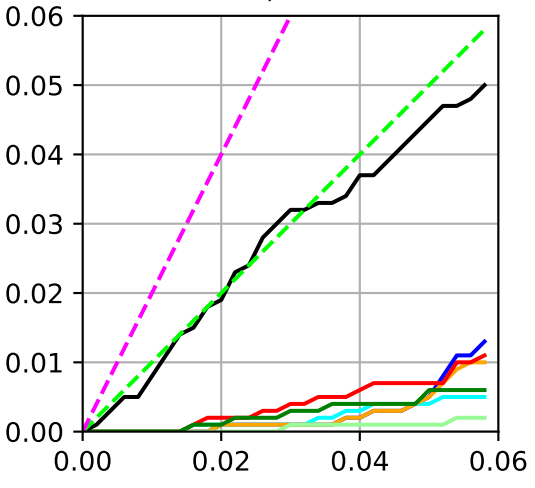

Cov: Normal, $\varepsilon$: LogNormal



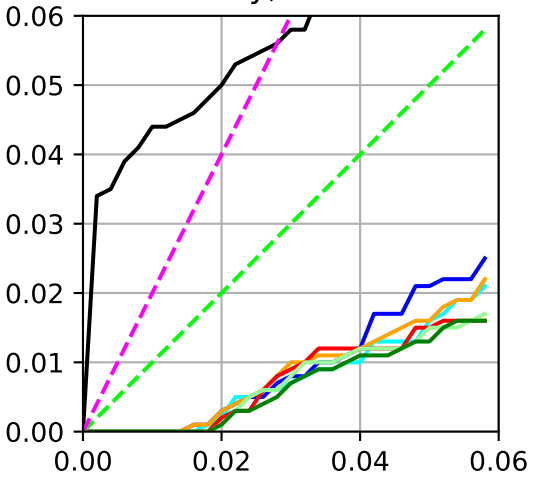

Cov: Cauchy, $\varepsilon$: LogNormal




Cov: Normal, $\varepsilon$: Multinomial




Cov: Cauchy, $\varepsilon$: Multinomial




P(p-val $\leq \alpha$) - Probability of making type I error at nominal level $\alpha$

$\alpha$ - Nominal level

OLS-L2
OLS-Huber
OLS-L1
F-test
Proven Bound
Huber-L2
Huber-Huber
Huber-L1
CDF of Uniform