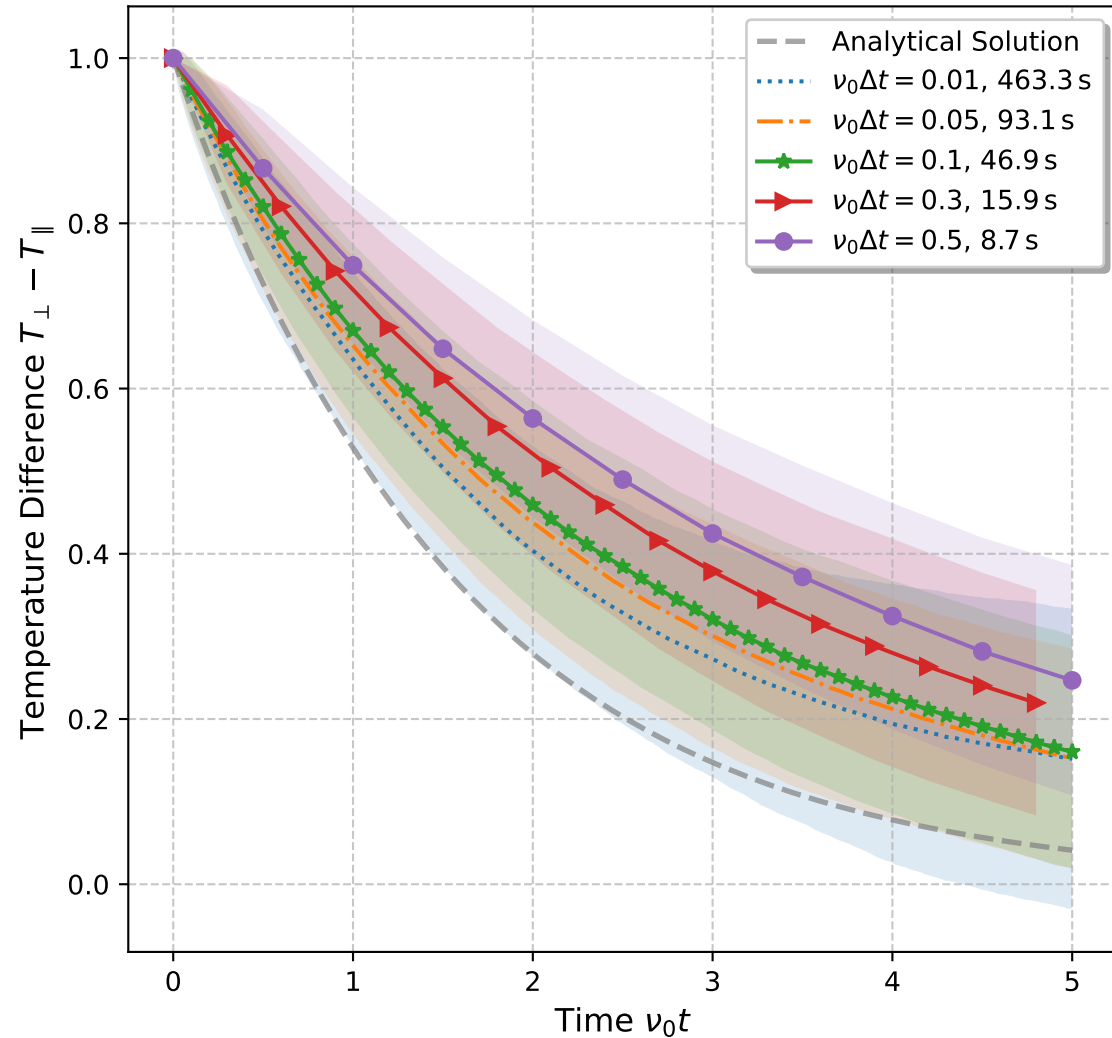Time Step Size Analysis

TA Method, $N = 3200$, 2000 Realizations

Nanbu Method, $N = 3200$, 2000 Realizations

Analytical Solution
$\nu_0 \Delta t = 0.01$, 463.3 s
$\nu_0 \Delta t = 0.05$, 93.1 s
$\nu_0 \Delta t = 0.1$, 46.9 s
$\nu_0 \Delta t = 0.3$, 15.9 s
$\nu_0 \Delta t = 0.5$, 8.7 s

Analytical Solution
$\nu_0 \Delta t = 0.01$, 626.7 s
$\nu_0 \Delta t = 0.05$, 161.9 s
$\nu_0 \Delta t = 0.1$, 78.2 s
$\nu_0 \Delta t = 0.3$, 27.7 s
$\nu_0 \Delta t = 0.5$, 17.4 s

Temperature Difference $T_\perp - T_\parallel$

Time $\nu_0 t$