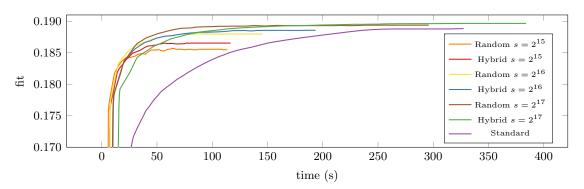


(a) Box plot of final fit and total time over 10 runs.



(b) Median fit (computed exactly) across 10 runs plotted for all methods.

Figure 0.1: Comparison of CP-ARLS-LEV (random and hybrid) with varying number of samples  $s \in \{2^{16}, 2^{17}, 2^{18}\}$  and CP-ALS (standard) to compute a rank r=25 CP decomposition of the Uber tensor with 3.3 million nonzeros. Random uses  $\tau=1$  and hybrid uses  $\tau=1/s$ . Each experiment is run 10 times.