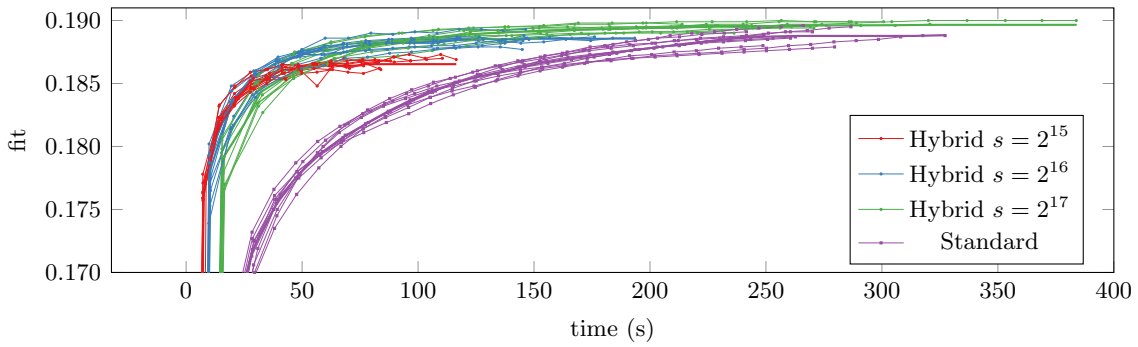


(a) Random ($\tau=1$) versus standard



(b) Hybrid ($\tau=1/s$) versus standard

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, showing individual runs for the plot in ???. The dotted lines represent the individual runs with markers indicating epoch (5 iterations) for the randomized methods and one iteration for the standard method. The solid lines show medians.