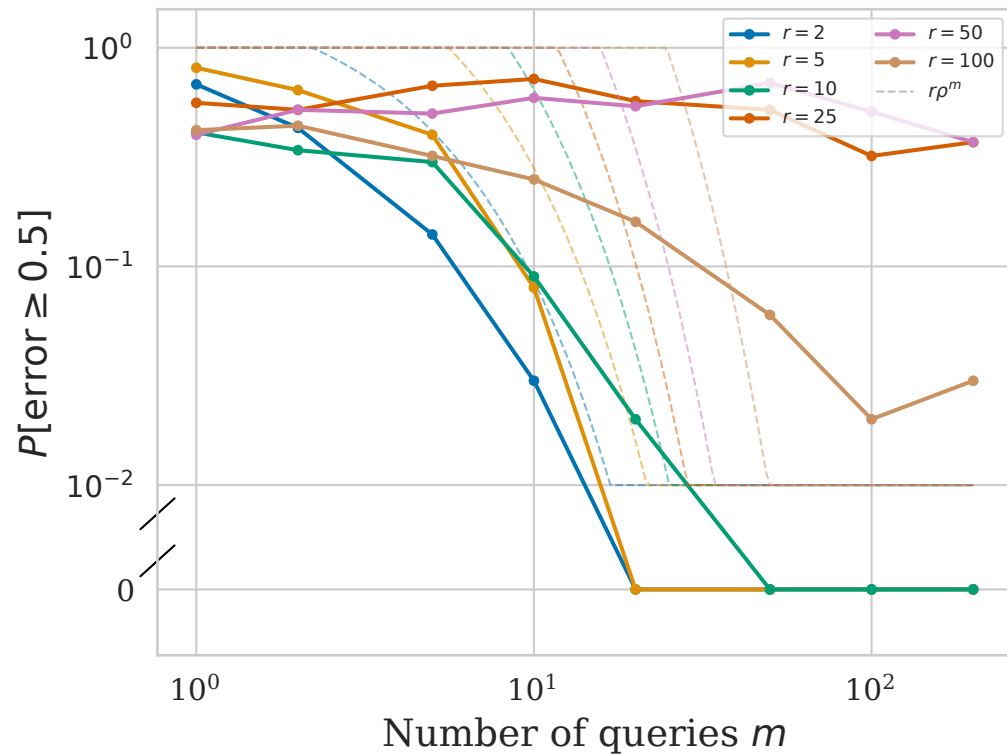
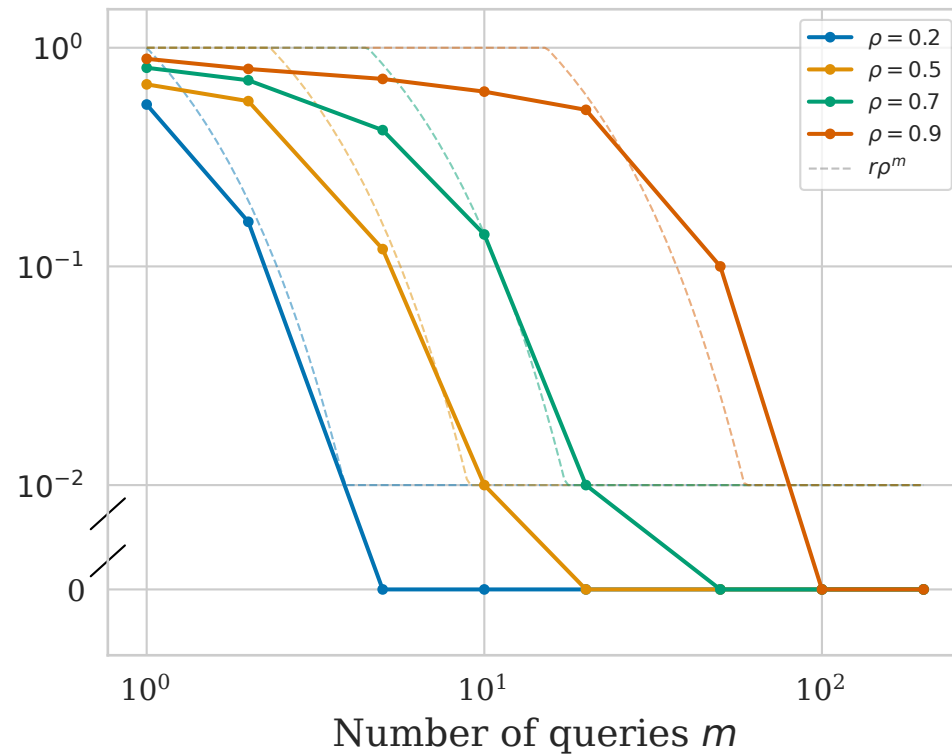


(a) Varying rank  $r$  ( $p = 0.3$ )(b) Varying  $\rho$  ( $r = 5$ )(c) Query distribution ( $r = 5, p = 0.3$ )