**Collision probabilities with cross–polytope LSH**
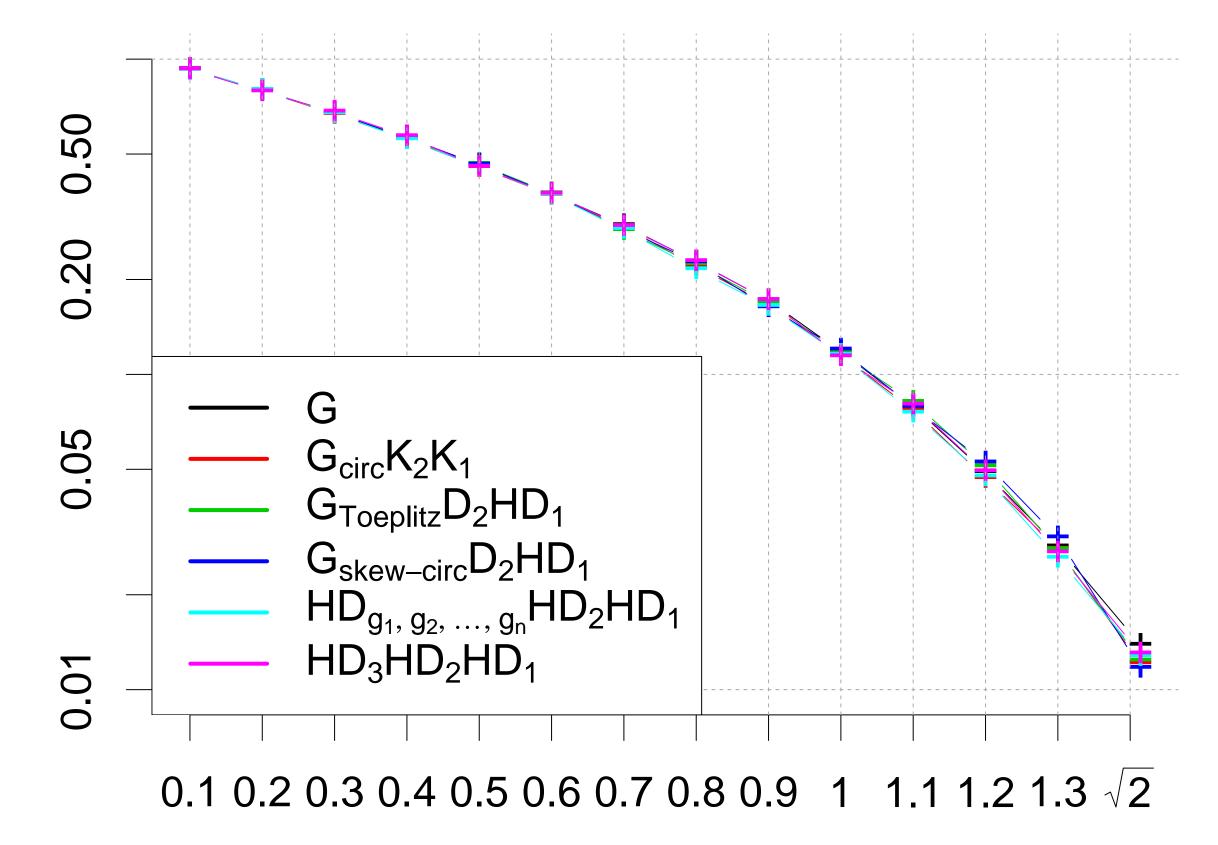
Collision probability

$G$

$G_{circ}K_2K_1$

$G_{Toeplitz}D_2HD_1$

$G_{skew-circ}D_2HD_1$

$HD_{g_1, g_2, \ldots, g_n}HD_2HD_1$

$HD_3HD_2HD_1$

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 $\sqrt{2}$

Distance