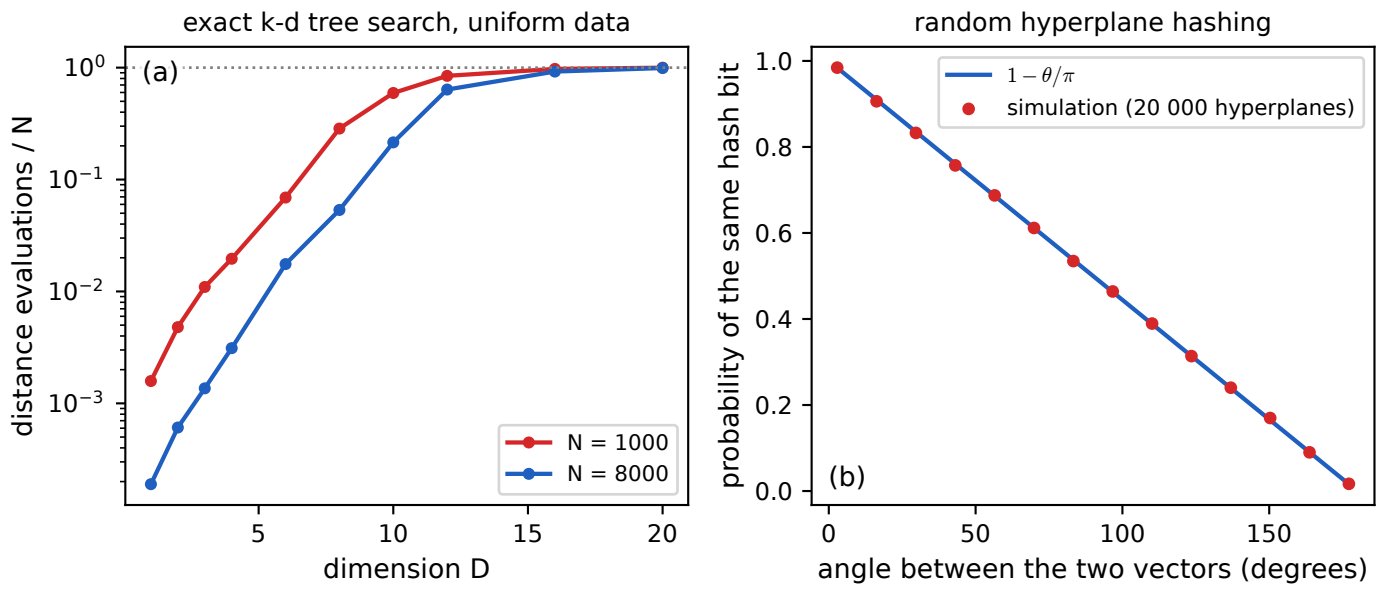

exact k-d tree search, uniform data
(a)
distance evaluations / N
10^0
10^{-1}
10^{-2}
10^{-3}
N = 1000
N = 8000
5
10
15
20
dimension D
random hyperplane hashing
$1 - \theta/\pi$
simulation (20 000 hyperplanes)
probability of the same hash bit
1.0
0.8
0.6
0.4
0.2
0.0
(b)
0
50
100
150
angle between the two vectors (degrees)