The probability of everyone visit hotel is 0.01

The probability of any two people deciding to visit a hotel is 0.0001.

The probability that two people visit the same hotel is $0.0001 / 500000 = 2 \times 10^{-10}$

The probability that two people visit the same hotel one four different days is $(2 \times 10^{-10})^4 = 1.6 \times 10^{-39}$

Number of pairs for n people is roughly $n/4$, in our case is $\binom{5 \times 10^9}{2} = 1.25 \times 10^{19}$

Number of pairs of days is $\binom{5000}{4} = 2.6 \times 10^{13}$

Expected number of events that look evil doing:

$2.6 \times 10^{13} \cdot 1.25 \times 10^{19} \cdot 1.6 \times 10^{-39} = 5.2 \times 10^{-7}$