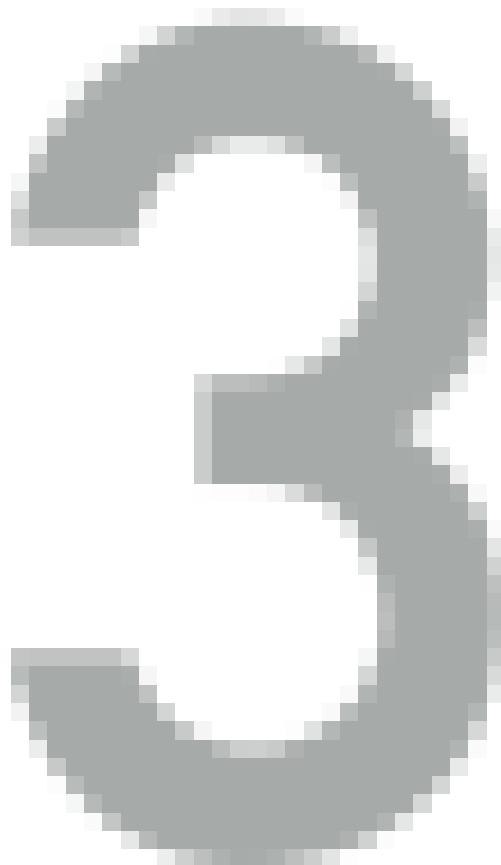
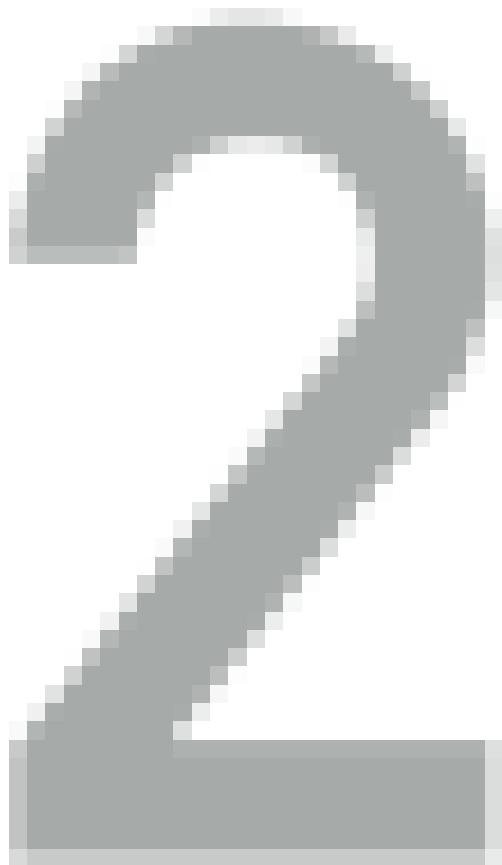


MONTE CARLO COMPUTATION

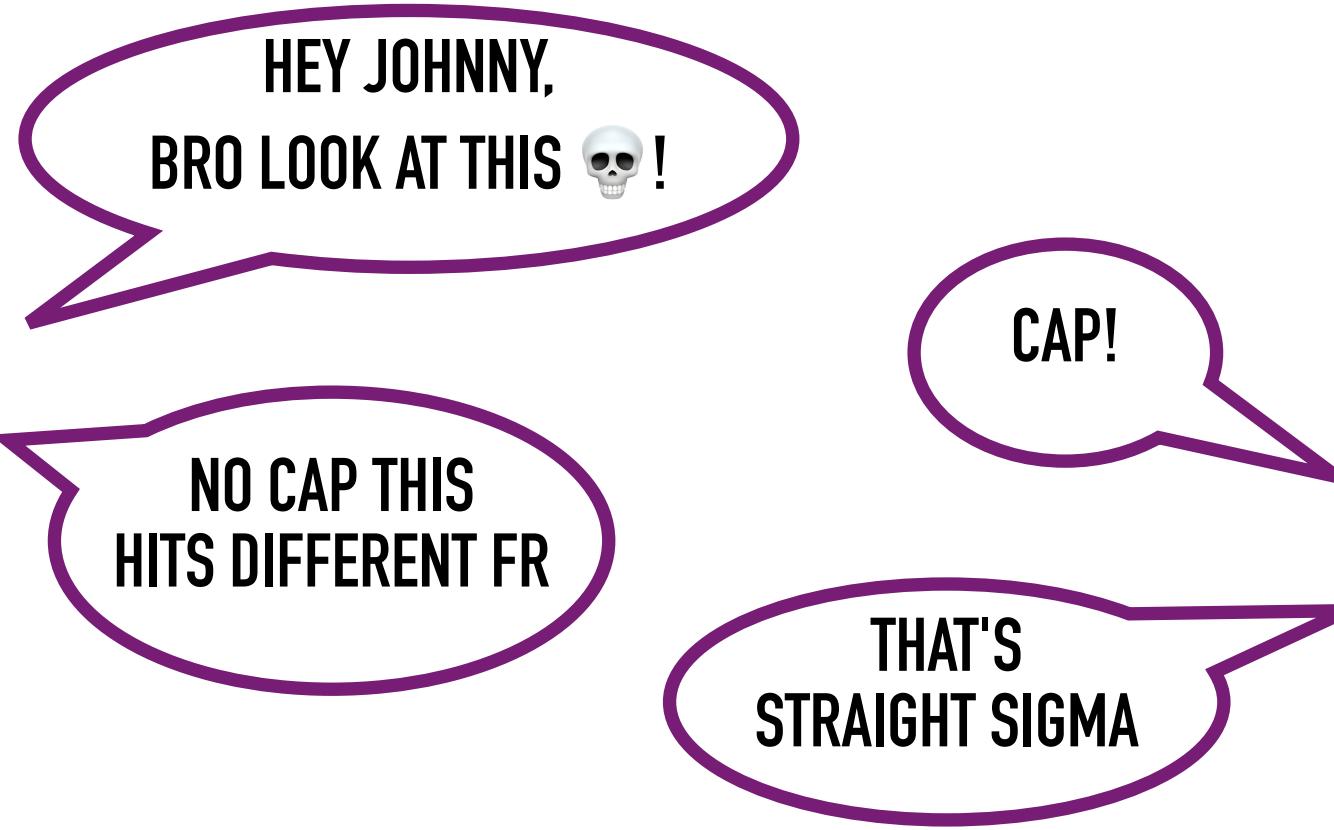
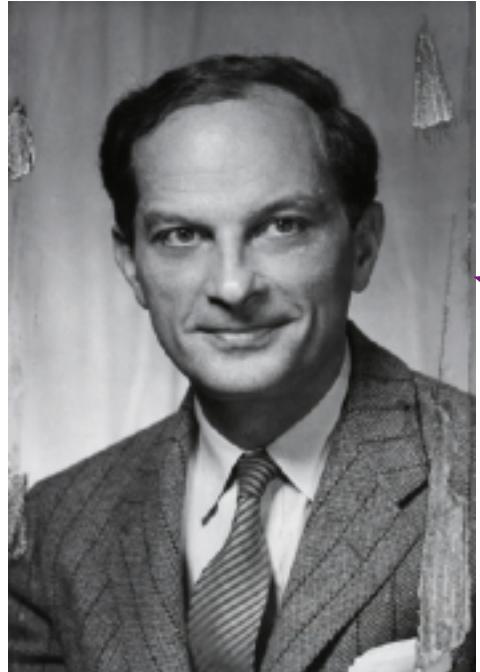




Monte Carlo was first used in the Manhattan Project to simulate the effects of different weapon designs. The first calculations were done on the ENIAC computer, and the results were published in 1947. The Monte Carlo method is a statistical technique that uses random sampling to estimate the value of a function. It is based on the law of large numbers, which states that as the number of trials increases, the average value of the function will converge to its true value. The Monte Carlo method is particularly useful for problems that are too complex to be solved by traditional analytical methods. It is also useful for problems that require a large number of calculations, such as those involving high-dimensional spaces or complex interactions between many variables. The Monte Carlo method is a powerful tool for solving a wide variety of problems in science, engineering, and finance.



- ▶ Stanislaw Ulam used in 1946 to estimate the probability of winning solitaire



Stanislaw Ulam



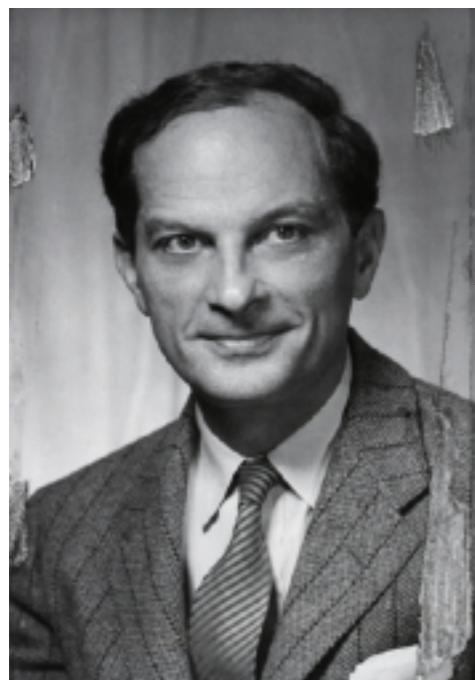
John Von Neumann

First time a computation was used as a template for a new computation

MONTE CARLO AND COMPUTATION

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- ▶ The history of Monte Carlo and computation are intimately related
- ▶ Monte Carlo was first used during the Manhattan Project with the ENIAC computer
 - ▶ Stanislaw Ulam used in 1946 to estimate the probability of winning solitaire
 - ▶ Neumann applied it to the bomb
 - ▶ First time computation was used as a replacement for math



HEY JOHNNY,
BRO LOOK AT THIS 💀 !

NO CAP THIS
HITS DIFFERENT FR

CAP!

THAT'S
STRAIGHT SIGMA



Stanislaw Ulam

John Von Neumann

MONTE CARLO AND COMPUTATION