

In Session: Monte Carlo Methods in physics, organized by Stanislaw Ulam

Speaker: Nicholas Metropolis

The Monte Carlo Method

Stanislaw Ulam

Los Alamos Laboratory, USA, ulam@lanl.gov

Nicholas Metropolis

Los Alamos Laboratory, USA, metropolis@lanl.gov

We shall present here the motivation and a general description of a method dealing with a class of problems in mathematical physics. The method is, essentially, a statistical approach to the study of differential equations, or more generally, of integro-differential equations that occur in various branches of the natural sciences.

- [1] N. Metropolis and S. Ulam. *The Monte Carlo Method*. Journal of the American Statistical Association, 44:247, 335–341, 1949.