

SAMPLE SPACE DEFINITION

Barry L. Nelson
Department of Industrial and Systems Engineering
The Ohio State University
Columbus, Ohio 43210

Bruce W. Schmeiser
School of Industrial Engineering
Purdue University
West Lafayette, Indiana 47907

ABSTRACT

The sample space definition of simulation experiments characterizes a simulation experiment in terms of the sample space and probability distribution of the inputs, an output function defined on the inputs, a sampling plan, a statistics function defined on the outputs, and parameters of interest that the statistics estimate. This definition is particularly useful for studying variance reduction techniques.

REFERENCE

Nelson, B.L. and B.W. Schmeiser, "A Mathematical-Statistical Framework for Variance Reduction, Part I: Simulation Experiments," Research Memorandum No. 84-4, School of Industrial Engineering, Purdue University, 1984.