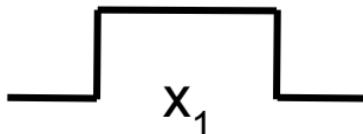
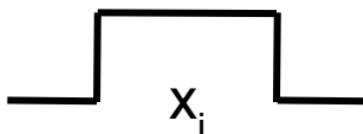


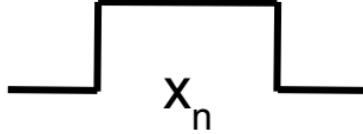
**Uniform distribution**  
of input model parameters



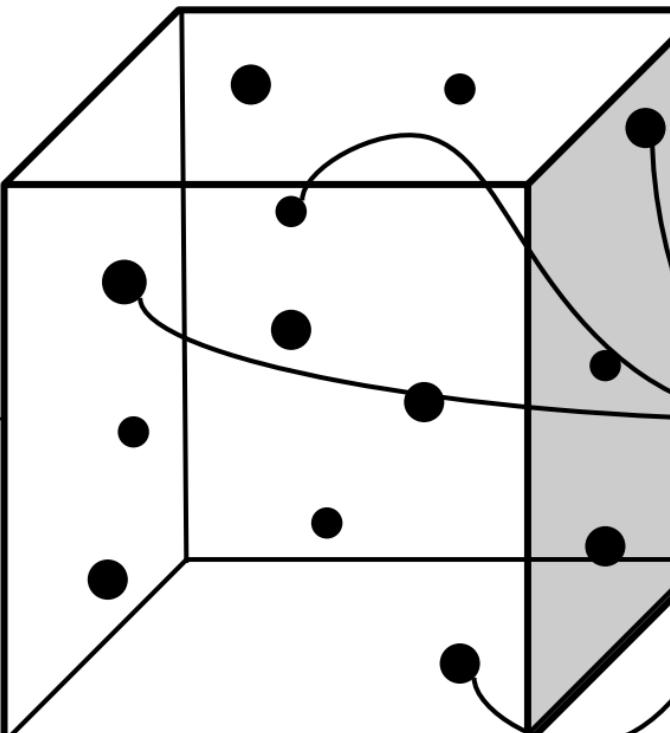
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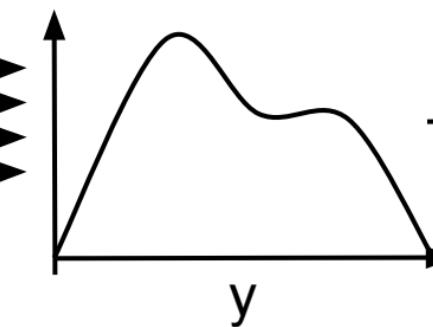
Sampling



Latin hypercube sampling

$Y$  : Distribution of model output

**Model**  
 $y=f(x_1, \dots, x_i, \dots, x_n)$



**Sobol index**  
 $S_i$

$S_i$  is the first order sobol index, the variance of  $Y$  when  $X_i$  is the only parameter to vary

$S_1$

$S_i$

$S_n$