function GEOMETRIC(number of nodes n, number of edges e,
number of operations o, number of dimensions $d = 3$)
$P \leftarrow$ Sample n points from a multivariate continuous uniform distribution $U_d((0,1)^d)$
$D \leftarrow$ Calculate distance matrix from P
$N_0 \leftarrow \text{HEAD}(\text{ARGSORT}(\text{LOWERTRIANGLE}(D)), e)$ ▷ Initial network
$N_p \leftarrow N_0$
$O \leftarrow ()$ ▷ Variable to store the generated operations in
while $|O| < o$ **do** ▷ Modify network until O is sufficiently large
$i \leftarrow$ Sample 1 index from $\{0 \,..\, n-1\}$
$P[i] \leftarrow$ Sample 1 point from a $U_d((0,1)^d)$ ▷ Give node i a new location
$D[i,] \leftarrow D[,i] \leftarrow$ Calculate new distances between node i and all other nodes
$N_c \leftarrow \text{HEAD}(\text{ARGSORT}(\text{LOWERTRIANGLE}(D)), e)$ ▷ New network
$O_a \leftarrow \{(\text{ADD}, e) \,|\, e \notin E(N_p) \wedge e \in E(N_c)\}$ ▷ Gather added edges
$O_r \leftarrow \{(\text{REM}, e) \,|\, e \in E(N_p) \wedge e \notin E(N_c)\}$ ▷ Gather removed edges
$O \leftarrow O + \text{SHUFFLE}(O_a + O_r)$ ▷ Append new operations to O
$N_p \leftarrow N_c$
end while
$O \leftarrow \text{HEAD}(O, o)$
return (N_0, O) ▷ Return the initial geometric network and o operations
end function