Algorithm 1: An Adaptive Local Search Algorithm (ALS[1]) for the Minimum Conductance Graph Partitioning Problem

	Output: best configuration S_{best} found
1	$p_s = 1/2$, $\Phi_{best} = \infty$
2	while stopping criteria are not met
3	set each bit of S to 1 with probability p_s
4	improve S using LS[1] until the local optimum is reached
5	if $\Phi(S) \leq \Phi_{best}$
6	$\Phi_{best} = \Phi(S)$
7	$p_s = p_s/2$
8	else
9	$p_s = 1/2$
10	return S_{best}