Input:

Pairwise similarity matrix, $s(i_1, i_2),\ \forall\ i_1 = 1, ..., N,\ i_2 = 1, ..., N$.
Trade-off parameter, T .
Requested number of clusters, N_c .
Convergence parameter, ϵ .

Output:

A (typically "soft") partition of the N elements into N_c clusters.

Initialization:

$m = 0$.
$P^{(m)}(C|i) \leftarrow$ A random (normalized) distribution $\forall\ i = 1, ..., N$.

While True

For every $i = 1, ..., N$:

- $P^{(m+1)}(C|\mathrm{i}) \leftarrow P^{(m)}(C) \exp\left\{\frac{1}{T}[2s^{(m)}(C;\mathrm{i}) - s^{(m)}(C)]\right\},\ \forall\ C = 1, ..., N_c$.
- $P^{(m+1)}(C|\mathrm{i}) \leftarrow \frac{P^{(m+1)}(C|\mathrm{i})}{\sum_{C'=1}^{N_c} P^{(m+1)}(C'|\mathrm{i})},\ \forall\ C = 1, ..., N_c$.
- $m \leftarrow m + 1$.

If $\forall\ i = 1, ..., N,\ \forall\ C = 1, ..., N_c$ we have $|P^{(m+1)}(C|i) - P^{(m)}(C|i)| \leq \epsilon$,
Break.