

$$G_{-\sigma}(s_{-i}k)=\sum_j l_j exp\left(-\frac{dist\left(b_i,b_j\right)}{2\sigma^2}\right)\left(s_j\right)^k$$

where

$l_j \in \mathbb{R}$  the length of  $b_j$

$dist \in \mathbb{R}^n, \mathbb{R}^n \rightarrow \mathbb{R}$  measures the geodesic distance between the centers of  $b_i$  and  $b_j$  along the boundary

$\sigma \in \mathbb{R}$

$b_i \in \mathbb{R}^n$

$b_j \in \mathbb{R}^n$

$s_j \in \mathbb{R}$  unit direction vector of  $b_i$

$k \in \mathbb{R}$  iteration number