Algorithm 1: selectCluster

Function *selectCluster*$(VT_i, d_i, da\_access, ivt, v\_free, G, K, phMatrix, n\_size, n\_prim)$

for k = *1 to* n_{prim} **do**

$V_{\text{cand}} = \emptyset$

$V_{\text{cand}} \leftarrow V_{\text{free}} \cap K_k^{(pos)}$

if $V_{cand} = \emptyset$ **then**

$\eta_k = \tau_k = 0$

else

$\eta_k = |V_{\text{cand}}| \cdot \sum_{v_j \in V_{\text{cand}}} |v_d - v_j|^{-1}$

$\tau_k = \frac{1}{|V_{cand}|} \cdot \sum_{v_j \in V_{\text{cand}}} \tau_{v_d v_j}^{(d_i)(VT_i)}$

$\eta_{sum} \leftarrow \sum_{k=1}^{n_{prim}} \eta_k^{\alpha}$

$\tau_{sum} \leftarrow \sum_{k=1}^{n_{prim}} \tau_k^{\beta}$

if η_{sum} = *0* **then**

for $k = n_{prim}$ + *1 to* $|K^{(pos)}|$ **do**

$V_{cand} = V_{free} \cap K_k^{(pos)}$

if $V_{cand} \neq \emptyset$ **then**

return k

for $k = 1$ *to* n_{prim} **do**

$p({K_k}^{(pos)}) = \frac{{\eta_k}^{\alpha} \cdot {\tau_k}^{\beta}}{\eta_{sum} \cdot \tau_{sum}}$

$p_{\text{sum}} = \sum_{k \in n_{prim}} p({K_k}^{(pos)})$

return $rouletteWheel(p(K), p_{sum})$;