```
1: Set \theta_0 = [0]_{|\mathcal{P}| \times n}
 2: repeat
              Calculate f_0 = \operatorname{argmin}_{f_0} C_g(f_0, \theta) for v \in \mathcal{P} do
 3:
 4:
                     Calculate R_v = Y - f_0 - \sum_{v \neq w} K_w \theta_w

if 2\|K_v^{1/2}R_v\|/\sqrt{n} \leq \mu_g then \theta_v \leftarrow 0
 5:
 6:
 7:
                      \mathbf{else}
 8:
                             \theta_v \leftarrow \operatorname{argmin}_{\theta_v} C_g(f_0, \theta)
 9:
                      end if
10:
              end for
11:
12: until convergence
```