

Loop over all substructures

for $s = 1, \dots, N$ *do*

Convergence indicator

$$t_i^s = \frac{\langle \mathbf{W}_i \boldsymbol{\alpha}_i, \mathbf{F}^{[s]} \mathbf{W}_i \boldsymbol{\alpha}_i \rangle}{\mathbf{r}_{i+1}^T \mathbf{S}^{[s]} \mathbf{r}_{i+1}}$$

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$$(t_i^s < t_i^{s-1}) \vee (i < i_{init})$$

true

false

$$\frac{t_i^s}{t_i^0} < \frac{100}{\tau}$$

true

false

Add direction to search space

$$\mathbf{Z}_{i+1} = [Z_{i+1} | \mathbf{S}^{[s]} \mathbf{r}_{i+1}]$$

\emptyset

\emptyset