
Algorithm 2 Creates $[G]_{\text{sta}} \in \mathbb{R}^{m \times 3 \times 3}$

```
1: procedure GSTA_ASSEMBLE
2:   #pragma omp parallel for
3:   for  $i := 1, m$  do
4:      $G_{\text{elem}} \leftarrow 0$ 
5:     for  $k := 1, 4$  do
6:       for  $y := 1, g$  do
7:         for  $x := 1, g$  do
8:            $G_{\text{elem}} \leftarrow G_{\text{elem}} + \text{GenerateMatrixGsta}(i, k, x, y)$      $\triangleright$  Return  $3 \times 3$  matrix
9:      $G[i] \leftarrow G_{\text{elem}}$ 
```
