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

procedure GSTA_ASSEMBLE
    #pragma omp parallel for
    for $i := 1, m$ **do**
        $G_{\text{elem}} \leftarrow 0$
        for $k := 1, 4$ **do**
            for $y := 1, g$ **do**
                for $x := 1, g$ **do**
                    $G_{\text{elem}} \leftarrow G_{\text{elem}} + \text{GenerateMatrixGsta}(i, k, x, y)$ ▷ Return 3×3 matrix
        $G[i] \leftarrow G_{\text{elem}}$