

## Parallel Minimum degree ordering

- algorithms not explicitly changing the graph
- algorithms changing the graph

### 1 finding indistinguishable nodes when computing reachable set

**Input:**  $v$  is the node eliminated at step  $s$ .  $R_v$  is its reachable set.  
 $marker$  and  $label$  arrays,  $tag$

$I \leftarrow \emptyset$

$D \leftarrow \emptyset$

$label(v) = s$

**forall the node**  $t \in R_v$  **do**

$tag = tag + 1$

**forall the node**  $u \in R_v$  **do**

$marker(u) = tag$

**end**

$tag = tag + 1$

$indist, \bar{R}_t \leftarrow get\_reach(t, tag, s, marker, label)$

$deg(t) = \|\bar{R}_t\|$

**end**