

## Ordered Undirected Graphs

## 1 Why

Need for perfect elimination orderings.

## 2 definition

An ordering of an undirected graph is a numbering of its vertices. An ordered undirected graph is a triple: the first two objects as an ordered pair are an undirected graph and the third object is a numbering of this graphs vertices.

## 3 Notation

Let G=(V,E) be an undirected graph with n=|V|. Let  $\sigma:\{1,2,\ldots,n\}\to V$  be a numbering of V. We denote the ordered graph consisting of G and  $\sigma$  as  $G_{\sigma}=(V,E,\sigma)$ .