

What are the intuitive meanings of each of the following equations or expressions from Cooper and John's paper?

- $V(e, \bar{e})$
- $V_1(e, \bar{e}) = 0$
- $S = \{e \in [0, E] \mid V_1(e, e) = 0\}$
- $V_2(e_i, \bar{e}) > 0$
- $V_{12}(e_i, \bar{e}) > 0$