

APPLIED MATHEMATICS COLLOQUIUM

Date: Wednesday, April 8, 2015

Time: 2:30 – 3:30 p.m.

Location: Middlesex College Room 204

Specifying Nodes as Sets of Choices

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Abstract:

Osborne and Rubinstein (1994) specify each node in a game tree as a sequence of actions. It is well-known that such actions can be replaced by choices (i.e. agent-specific actions) without loss of generality.

I find that this sequential formulation is redundant in the sense that nodes can be equivalently specified as *sets* of choices. The only cost of doing so is to rule out absent-mindedness. My analysis encompasses both ordered and unordered information sets and both finite and infinite horizons. (This specification of nodes as sets of choices complements the literature's specification of nodes as sets of outcomes.)