

## Lecture 4 Outline

**Reading:** *text*, §3.2-3.3

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1. Conspiracy
  - a. Access set
  - b. Deletion set
  - c. Conspiracy graph
  - d.  $I, T$  sets
  - e. Theorem:  $can\text{-}share(r, \mathbf{x}, \mathbf{y}, G_0)$  iff there is a path from some  $h(\mathbf{p}) \in I(\mathbf{x})$  to some  $h(\mathbf{q}) \in T(\mathbf{y})$
2. *de facto* rules
  - a. pass, post, spy, find
  - b.  $can\text{-}know(\mathbf{x}, \mathbf{y}, G_0)$
  - c.  $rw$ -terminal,  $rw$ -initial spans
  - d. Connections
  - e. Necessary and sufficient conditions for  $can\text{-}know(\mathbf{x}, \mathbf{y}, G_0)$  to hold
3. Schematic Protection Model
  - a. Protection type, ticket, function, link predicate, filter function
  - b. Take-Grant as an instance of SPM
  - c. Create rules and attenuation
4. Safety analysis
  - a. Definitions
  - b.  $path^h$  predicate, capacity flow function
  - c. Capacity
  - d. Maximal state