Preview of L10: (#P & ASP)

NP = \{ decision problems \mid poly-time certificates = solutions \}

NP search problem = find a solution (if any)
- at least as hard as decision problem

Counting version \#X of NP search problem X:
- compute how many solutions
- at least as hard as decision problem (0 vs. >0)
- \#X (or X) is \#P-hard if \#X is at least as hard as all such problems (#P)

Another Solution Problem: ASP X = given an instance & one solution, is there another?
- negation of “is this solution unique?”
- X is ASP-hard if ASP X is NP-hard

C-monious reduction from A to B if
- \# solutions to B = \frac{C}{\# solutions to A}
  - for \#P-hardness
Parsimonious = 1-monious
- for \#P- & ASP-hardness
Coauthor tips:
- use message titles (for TOC)
- delete blank messages
- delete makes message invisible to others (except staff)
- unpublish does the same
- minimize makes message default-folded (only title visible, click + to expand)

- @mentioning is local to message ~
- replies/attachments need them repeated (for solved problems)

- edit old messages to flesh out details
- emoji responses
- drag messages in TOC to re-parent

- list of Markdown & LaTeX features
- Github issues

Documentation link at bottom