

So if a Markov network
is either

① A tree ② A chain

or ③ is triangulated, you
pose the inference problem as
a Linear program that can
be solved in $O(n^4)$ using the
Ellipsoid algo or Karmarkar's
algo. ~~# variables~~
Best in practice in LP

Markov N/W

Not triangulated

Hard

Triangulated

Binary & submodular

Unimodularity & Relaxed integer program gives optimal soln

Can map to max flow / min cut problem

Constrained Conditional models

Constrained

Conditional models

