

# ORDERING ISSUES FOR MARKOV MORAL MODEL

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## 1. COMBINATORIAL EXPLOSION PROBLEM

Ordering has to be determined among 16 variables. Now 16 factorial is outrageously large.

Here I consider alternative paths. The path that occurs immediately is to order them by closeness to *stationary distribution* of the Markov generator.

Recall from Markov Chain theory that if  $P$  is the Markov generator matrix, then  $P^m$  will tend to a matrix with all rows identical. Then the rows are the stationary distribution.

Our algorithm is to use  $P_0$  which is fit with ordering Q177–Q195 (excluding some). Then we just reorder the variables from the right end by ordering of distance to the stationary distribution.