Jason R Morton*, Department of Mathematics, Evans Hall, University of California, Berkeley, Berkeley, CA 94720. *Relations among conditional probabilities*. Preliminary report.

We describe a Gröbner basis of relations among conditional probabilities in a discrete probability space, with any set of conditioned-upon events. They may be specialized to the random variable case, the purely conditional case, and other special cases. We also investigate the connection to generalized permutohedra. (Received September 11, 2007)