## 1014-Z1-255 Milo Schield\* (schield@augsburg.edu), 2211 Riverside Drive, Minneapolis, MN 55454, and Tom Burnham. Confounders as Mathematical Objects.

Without giving a mathematical nature to confounders, it is difficult, if not impossible, to measure them, to measure their influence on statistical associations. A mathematical structure is introduced to talk about confonders – binary factors that are related to an association of binary variables. The derivation of this structure is presented along with the mathematical implications. In particular, the size confounder needed to nullify or reverse an existing association is derived for a variety of measures. Finally, confounder intervals are introduced as a way of measuring the influence of these confounders. (Received August 31, 2005)