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Svante Linusson and **Matthew T. Stamps*** (matt.stamps@yale-nus.edu.sg). *Simpson's paradox and the triangulations of the cube.*

Simpson's paradox is a phenomenon in statistics in which a trend that appears in different data sets disappears or reverses when the sets are combined. In this talk, I will present a generalization of Simpson's paradox on $2 \times 2 \times 2$ contingency tables and characterize the circumstances in which the phenomenon can and cannot occur. The methods will be combinatorial-geometric in nature and involve triangulations of the 3-dimensional cube. (Received January 17, 2019)