

GRADUATE SEMINAR

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The Bradley-Terry model for paired competitions

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3:30 PM

Mathematics and Statistics Lounge, CW307.37

Abstract: A Bradley-Terry model is a seemingly simple model for predicting outcomes of paired competitions. Of particular interest is its potential usefulness in estimating the relative contribution or value of individual team members when individual performance statistics are not available or sufficiently illustrative. However, estimation of the model's parameters is not trivial and generally relies on iterative techniques such as majorization/minorization algorithms or back-propagation neural networks. This seminar aims to discuss the Bradley-Terry model and some extensions thereof, to present some parameter estimation algorithms, and to provide an illustrative example of the model's application with real competition data.