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**FUQI CHEN**, University of Windsor, 401 Sunset Avenue, Windsor, ON N9B 3P4  
*Equivariance method and generalized inference in two-sample location-scale families*

Recently, generalized inference has become an efficient and useful tool which gives more accurate intervals for a variety of intractable complex problems such as the Behrens–Fisher problem. In this talk, we will present a generalized inference solution of typical Behrens–Fisher problem in general location-scale families. The proposed solution is based on the minimum risk equivariant estimators and thus, the underlying approach is an extension of the methods based on maximum likelihood estimators and conditional inference, which have been so far, applied to some specific distributions. Finally, we will present some simulation results as well as analysis results of two real data sets.