On exact tests in unbalanced mixed linear models

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Abstract

Exact tests for variance components in unbalanced mixed linear models with patterned covariance structures are presented. The derivation utilizes orthogonal transformations and a subsequent resampling. The work is related to Gallo & Khuri (1990) and Öfversten (1993).

Keywords

Exact tests, Hypothesis testing, Unbalanced mixed models, Variance components.

References

Gallo, J., Khuri, A.I. (1990). Exact tests for the random and fixed effects in an unbalanced mixed two-way cross-classification model. *Biometrics* 46, 1087–1095.

Öfversten, J. (1993). Exact tests for variance components in unbalanced mixed linear models. (English, French summary). *Biometrics* 49, 45–57.