# Approximate interval for the between-group variance under heteroscedasticity<sup>1</sup>

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#### Abstract

We will present an approximate confidence interval for the betweengroup variance in one-way heteroscedastic random-effects model. Derivation of the interval is inspired by the ideas in Williams (1962) for the homoscedastic case. Simulations suggest that the proposed interval performs better than or comparably to the other available procedures as studied in Wimmer, Witkovský (2003), Hartung, Knapp (2005), Li (2007). Moreover, it is relatively easy to compute.

### Keywords

Variance components, Heteroscedasticity, One-way ANOVA, Approximate confidence intervals.

# References

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