STRUCTURED STAIR NESTING MODELS-TWO APPROACHES

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Abstract

The structured stair nesting model was proposed by [4] and it was introduced according with a step by step approach. The purpose of this work is to show that structured stair nesting models can be analyzed with a diferent approach, which we call global approach. We also show that, the two approaches, although originating different algebraic structures, allow to obtain the same estimators for the variance components. To express the algebraic structure of these model we will use commutative Jordan algebras.

Keywords: structured stair nesting models, commutative Jordan algebras, variance components.

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