

BLOCK MATRIX APPROXIMATION VIA ENTROPY LOSS FUNCTION

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The purpose of this talk is to present a procedure of approximation of symmetric positive definite matrix by symmetric block partitioned matrices with structured off-diagonal blocks. We consider off-diagonal blocks which can get one of the following structures: all of its elements are equal (this block can be also considered as a part of compound symmetry structure) or the off-diagonal blocks are proportional to respective sub-block of the first-order autoregression matrix. The entropy loss function is chosen as approximation criterion. This procedure is applied in statistical problem of covariance structure identification. We perform simulation studies to verify whether the entropy loss function recognizes given covariance structure properly. The presented results were carried out in cooperation with A. Markiewicz and M. Mokrzycka.

Literatura

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