



## ADMISSIBILITY AND $\Gamma$ -MINIMAXITY OF LOSSESTIMATORS IN MULTIVARIATE LINEAR MODEL

<http://www.firstlight.cn> 2007-08-07

$0$  are known  $t \times n$  and  $m \times m$  matrices respectively  $\bar{B} = (X'G^{-1}X)^{-1}X'G^{-1}y$ . It is proved that the uniformly minimum risk unbiased estimator of  $L$ ,  $\bar{L}_0 = (tr CV)SX(X'G^{-1}X)^{-1}X'S'$ , is admissible for  $q = \text{rank}SX = 1$  and  $m \leq 4$ , or for  $q \geq 2$  and  $m \leq 2$  and inadmissible for  $m \geq 5$  with a matrix loss function. It is also shown that the above  $\bar{L}_0$  is a  $\Gamma$ -minimax estimator of  $L$  against a class of priors.

[存档文本](#)