



Volume 4, Issue 4, Article 71

## On Fisher Information Inequalities and Score Functions in Non-invertible Linear Systems

**Authors:** [Christophe Vignat](#), [J.-F. Bercher](#),

**Keywords:** Fisher information, Non-invertible linear systems.

**Date Received:** 04/06/03

**Date Accepted:** 09/09/03

**Subject Codes:** 62B10, 93C05, 94A17.

**Editors:** [Frank Hansen](#),

**Abstract:**

In this note, we review score functions properties and discuss inequalities on the Fisher Information Matrix of a random vector subjected to linear non-invertible transformations. We give alternate derivations of results previously published in [6] and provide new interpretations of the cases of equality.

[6] R. ZAMIR, A proof of the Fisher information matrix inequality via a data processing argument, *IEEE Trans. on Information Theory, IT*, **44**(3) (1998), 1246-1250.



[Download Screen PDF](#)



[Download Print PDF](#)



[Send this article to a friend](#)



[Print this page](#)

search

[\[advanced search\]](#)

copyright 2003

[terms and conditions](#)

[login](#)