

Some notes on scatter matrices and independent component analysis (ICA)

Hannu Oja

University of Jyväskylä, Finland

Abstract

A matrix functional $C(F)$ (for a p -variate distribution F) is called a scatter matrix if it is a positive definite symmetric $p \times p$ -matrix with the affine equivariance property. Some interesting M -functionals are discussed in more details. Finally, the use of different scatter matrices $C(F)$ in the independent component analysis (ICA) is discussed.