## Multivariate second-order random fields in space and time

by

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## Abstract

We will talk about multivariate random fields with second-order moments, and will address two crucial questions for such a random field, what kind of the square matrix function can be employed as its covariance matrix, and, in particular, what type of the functions can be employed as its cross-covariances. Some parametric or nonparametric examples are given for stationary and nonstationary cases in a temporal, spatial, or spatio-temporal domain.