Time-Frequency Decomposition of Multivariate Multicomponent Signals

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HIGHLIGHTS

- Decomposition of multicomponent multivariate signals which partially overlap in the joint time-frequency domain is presented.
- The method is based on the eigenvectors of the signal autocorrelation matrix.
- The multivariate signal components are obtained as linear combinations of the eigenvectors that minimize the concentration measure in the time-frequency domain.
- Simulation results validate the proposed method.