Non-Orthogonal Tensor Diagonalization

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Highlights

- A novel non-orthogonal tensor diagonalization method is proposed.
- It can have form of two sided or three sided diagonalization, or block-diagonalization.
- It can serve as a new method of Canonic Polyadic (CP) tensor decomposition, but even more importantly for block-term tensor decomposition.
- The proposed method has low computational complexity, similar to that of the popular Alternating Least Squares algorithm for CP decomposition
- In comparison with other CP decomposition and block-term decomposition methods, the proposed one is less sensitive to wrong initialization.