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Review text:

There exist many reliable methods of an efficient iterative diagonalization of a real, n by n symmetric matrix H where the diagonal matrix elements dominate and are well separated. In this context, the author surprized me by having offered an interesting new idea. In fact, it may summarized easily: after an "introductory" standard triangular-matrix pre-factorization of $H = LL^T$, the author notices that the solution (making OHO^T diagonal) may be seen as equivalent to the search for the n^2 real matrix elements of the product OL by the Newton-Kantorovich method.

The numerical practicioner's community must be warned in advance: With all probability the method working with the $n^2 \times n^2-$dimensional matrices will prove neither useful nor efficient. Indeed, the author describes his/her method by describing thoroughly the n=3 case (and even this analysis is not particularly short) and illustrates its application on a sparse n=4 model. Nevertheless, I found an appeal of his/her proposal in the proof of the exact convergence of the recipe under certain assumptions.