SVD decomposition

# SVD decomposition

if is self-adjoint, positive define than

singular values:

orthogonal eigenvectors:

other vector:

## Example

I. Calc ().

II. Eigenvalues and eigenvectors

II.I. Calc eigenvectors

II.II. Calc eigenvectors

III. Calc orthogonal eigenvectors

III.I.I. Calc

III.I.II. Calc

III.I.III. Calc

III.II.I. Calc .

III.II.II. Calc

II.III. Calc

IV. Calc matrix

=1

IV. Calc matrix

V. Check