

# Algorithms of two-dimensional hypercomplex discrete Fourier transform

M.V. Aliev<sup>1</sup>, A.M. Belov<sup>2</sup>, A.V. Ershov<sup>3</sup>, M.A. Chicheva<sup>4</sup>

<sup>1</sup>Adyge State University

<sup>2</sup>Samara State Aerospace University

<sup>3</sup>Samara State University

<sup>4</sup>Image Processing Systems Institute of RAS

## Abstract

The paper considers the methods of parallel computation of multidimensional hypercomplex discrete Fourier transform. The main idea is to use the properties of the hypercomplex algebra, in which this transform is performed. The natural parallelism of the multidimensional Cooley-Tukey scheme provides additional opportunities for improving the efficiency of the algorithm.

**Keywords:** two-dimensional hypercomplex, Fourier transform, parallel computation, hypercomplex algebra, Cooley-Tukey scheme.

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## References

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