

# Algorithms of quasi evaluation of polynomial trend of the digital signals based on oblique discrete walsh transformations

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## Abstract

© 2016 IEEE. In this article, we consider applications of oblique discrete Walsh transformation algorithms at synthesizing a quasi-evaluation of polynomial trend models of digital signals. We consider peculiarities of computational complexity of the proposed algorithms and statistical properties of the estimated parameters of the polynomial trend in degree higher than the third level. The advantages of these algorithms are low multiplicative complexity and relative simplicity of the hardware implementation of binary arithmetic means.

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## Keywords

digital signal processing, discrete transform, oblique discrete Walsh transformations, parametric estimation, polynomial trend models

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