Name : Udomkiat Nontakaew

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Thesis Advisors : Assoc. Prof. Dr. Thanu Chouychai,

Dr. Virat Chomkwah

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## Abstract

The thesis proposes algorithm of Hilbert transform calculation in frequency domain which numerical integrates Kramers-Kronig's relation. The limits of integration begin from zero frequency to the maximum frequency of which the value of transfer function is known. The correction term is integrated from extending transfer function which is obtained by curve fitting. The advantages of this algorithm are : it has little errors and it can be used with any type of transfer functions.

Main errors while calculating Hilbert transform result from integration method and truncation error.