

Inequality and Estimate of Generalized Pseudo-differential Operators Involving Fractional Fourier Transform

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ABSTRACT

Firstly, we define two types of generalized pseudo-differential operators with the help of symbol classes. The main objective of this paper is to obtain some inequalities of generalized pseudo-differential operators $A(x, \Delta'_x)$ and $\mathbf{A}(x, \Delta'_x)$ and also discuss some estimates of these operators. In this paper we will also study the order of generalized pseudo-differential operators $A(x, \Delta'_x)$ and $\mathbf{A}(x, \Delta'_x)$ and obtain some inequalities of these operators.

Keywords: Generalized pseudo-differential operators, Fractional Fourier transform, Tempered distribution, Symbol Classes.

