ABSTRAK

OPERATOR INTEGRAL FRAKSIONAL
DAN KETAKSAMAAN OLSEN
DI RUANG TAK HOMOGEN

Oleh

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Di dalam tesis ini akan dibuktikan keterbatasan operator integral fraksional di ruang Lebesgue tak homogen dan di ruang Morrey tak homogen yang diperumum. Ukuran di ruang tak homogen tidak memenuhi kondisi *doubling* seperti halnya di ruang homogen, tetapi merupakan ukuran *growth*. Selanjutnya juga akan dibahas ketaksamaan Olsen di kedua ruang tersebut.

Kata kunci: Operator integral fraksional, Ukuran *growth,* Ruang Lebesgue tak homogen, Ruang Morrey tak homogen yang diperumum

ABSTRACT

FRACTIONAL INTEGRAL OPERATORS
AND OLSEN'S INEQUALITIES
ON NON-HOMOGENEOUS SPACES

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In this thesis we discuss the boundedness of fractional integral operators on non-homogeneous Lebesgue spaces as well as on generalized non-homogeneous Morrey spaces. Non-homogeneous spaces are spaces that are endowed with a growth measure. We will also prove Olsen's inequalities on both spaces.

Key words: Fractional integral operators, Growth measure, Non-homogeneous Lebesgue spaces, Generalized non-homogeneous Morrey spaces