1056-42-709   **Mukta B Bhandari*** (`mukta@math.ksu.edu`), 1544 International Court, Apt. # 23, Manhattan, KS 66502. *Good Lambda Inequality and Riesz potentials for Non Doubling Measures in* $\mathbb{R}^n$. Preliminary report.

We obtain Good Lambda Inequality for non doubling measures in $\mathbb{R}^n$ associated to Riesz Potentials. We also extend this to weight w associated to non doubling measure. We apply this to obtain Potential inequalities. Key words: maximal functions, fractional maximal functions, growth condition, Riesz potentials. (Received September 16, 2009)

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