1047-28-55   **A. Eduardo Gatto*** (`aegatto@depaul.edu`), 2320 N. Kenmore, 5th floor, Chicago, IL 60015.
Boundedness on inhomogeneous Lipschitz spaces of fractional integrals, singular integrals and hypersingular integrals associated to non-doubling measures.

In the context of a finite measure metric space whose measure satisfies a growth condition, we prove "T1" type necessary and sufficient conditions for the boundedness of fractional integrals, singular integrals, and hypersingular integrals on inhomogeneous Lipschitz spaces. We also indicate how the results can be extended to the case of infinite measure. Finally we show applications to Real and Complex Analysis (Received January 06, 2009)