Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

Javad Namazi\* (namazi@fdu.edu), 285 Madison Avenue, Madison, NJ 07940. A more general Lebesque theorem. Preliminary report.

We will develop a formula that extends the limit of averages of a moderately smooth function in a Sobolev space using Bessel capacity. We will determine, among others, the rate of convergence of such limits. (Received August 15, 2004)