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Javad Namazi* (namazi@fdu.edu), 285 Madison Avenue, Madison, NJ. *A $C^{k,\lambda}$ approximation of Sobolev functions in norm and capacity.*

It is known that any function $u \in W^{k,p}(R^n)$ can be modified on a set of small Bessel capacity $B_{k-m,p}$ to yield a function $w \in C^m$ which closely approximates u in the sense of Sobolev norm $W^{m,p}$. One can show that the approximation can be performed by means of $C^{m,\lambda}$ functions using a non-Whitney extension formulas. (Received August 16, 2005)