Strong Consistency of Regression Function

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Abstract: Let $m_n(x)$ and $M_n(x)$ be a partitioning estimate and the kernel estimate, respectively, of a regression function m(x) = E(Y|X=x) for the i.i.d. sample $(X_1, Y_1), \ldots, (X_n, Y_n)$. Under the condition $E|Y|^p < \infty$, where p > 1, and some conditions on the partition and the kernel function, the strong L_1 -consistency is proved.

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AMS Subject Classification: