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NONPARAMETRIC ESTIMATION OF A REGRESSION FUNCTION BY DELTA SEQUENCES

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Abstract. A somewhat more general class of nonparametric estimators for estimating an unknown regression function g from noisy data is proposed. The regressor is assumed to be defined on the closed interval [0, 1]. This class of estimators is shown to be pointwisely consistent in the mean square sense and with probability one. Further, it turns out that these estimators can be applied to a wide class of noises.

Key words and phrases: Nonparametric regression, mean square convergence, strong consistency, delta sequences.