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**Strong consistency and rates for recursive probability density estimators of stationary processes.** (English) [Zbl 0619.62079](#)

J. Multivariate Anal. 22, 79-93 (1987).

Authors's abstract: Let  $\{X_j\}_{j=-\infty}^{\infty}$  be a vector-valued stationary process with a first-order univariate probability density  $f$  on  $\mathbb{R}^d$ . Recursive estimation of  $f(x)$  from  $n$  not necessarily independent observations  $\{X_j\}_{j=1}^n$  is considered. For processes  $\{X_j\}_{j=-\infty}^{\infty}$  which are asymptotically uncorrelated, sharp rates for the almost sure convergence of kernel-type estimators  $f_n(x)$  are established.

Reviewer: St.Werner (RGänfler)

**MSC:**

[62M09](#) Non-Markovian processes: estimation

[62G05](#) Nonparametric estimation

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**Keywords:**

density estimation; weakly dependent stationary processes; vector-valued stationary process; Recursive estimation; not necessarily independent observations; asymptotically uncorrelated; sharp rates for the almost sure convergence of kernel-type estimators

**Full Text:** [DOI](#)

**References:**

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