



## BLOCK-BASED RECONSTRUCTION OF SIGNALS FROM NONUNIFORM SAMPLES (MonPmOR7)

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**★** Abstract :

We present a novel approach for reconstructing the uniform samples of a signal from its nonuniform samples. Two new algorithms are proposed in this context for the reconstruction of time–limited signals. These block–based methods are proved to be stable and that the reconstruction error is always bounded by the norm of the input error sources. We considered the sampling jitter and noise for this purpose. Proposed methods have good properties in terms of both theoretical and practical standpoints. The performances of the algorithms are shown through a set of simulations for a variety of signal, noise and sampling grids.