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Regularized Restoration for Two Dimensional Band-Limited Signals.

In this paper the ill-posedness of restoring lost samples is discussed in the two dimensional case. The restoration algorithm by Shannon’s Sampling Theorem is analyzed. A regularized restoring algorithm for two dimensional band-limited signals is presented. The convergence of the regularized restoring algorithm is studied and compared with the restoration algorithm by Shannon’s sampling theorem in the two dimensional case. (Received September 01, 2013)