Motion Aided Sampling and Reconstruction

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Abstract –   Motivated by motion compensated filtering in image processing we consider the problem of sampling and reconstruction of signals with sampling rates below the Nyquist rate. It is assumed that temporal dependence can be induced via motion. This way, the data consists of both spatial and temporal sampling and we analyze here the conditions for reconstruction for a number of typical motions.

Keywords: Sampling, super resolution, reconstruction

EDICS: 2–RECO

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