$\begin{array}{c} \text{Lior Horesh} \\ \textbf{A multilevel method for } \ell_1 \ \textbf{minimization} \end{array}$

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Solving inverse problems using sparsity as a regularization is a new and promising frontier. So far a fixed, single level approach is taken for the solution of the problem.

In this work we present a multilevel approach for the solution of the problem. We generate a multilevel dictionary which adopts to the images at different levels.