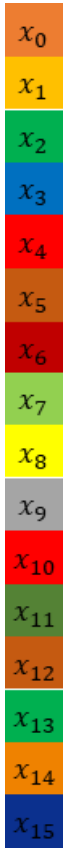
Compressed data
Measurement (Y)

$M \times 1$

To reconstruct

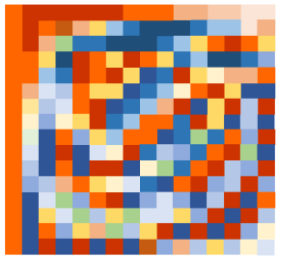
NP-hard problem

Original vector
signal X



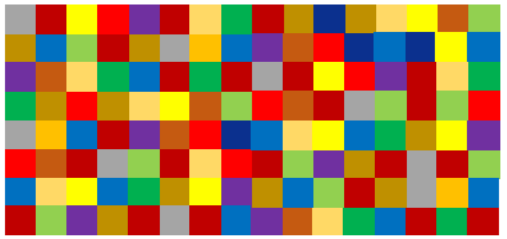
$N \times 1$

Transform matrix



$N \times N$

Measurement matrix

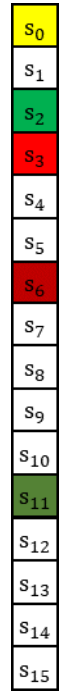


$M \times N$

Incoherence

Sparse

$\hat{\theta}$



$N \times 1$

Transform domain

- *S is the count of non-zero numbers in the vector*
- $S \ll M < N$