Residual energy recovery in distorted images

Standard linear methods used for noise removal in images, tend to leave behind a coherent energy in the residuals. Often this energy is recognized by human eye as a part of the main signal, yet the linear methodology cannot separate the two. In this project, we will work with sparse encoding and dictionary learning using nonlinear methods to distill out the remaining coherent part of the signal. The method can be further developed to include cases where there is spatial correlation in the noise component.