Homework 2







Algorithm

• initalize
$$X^{(1)}$$
 $Z^{(1)}$

• repeat

$$1.Y^{(k)} = Z^{(k)} + \delta \times P_{\Omega}(X - Z^k)$$

$$2.X^{(k+1)} = Prox_{\frac{h}{M}}(Z^{(k)})$$

$$3.Z^{(k+1)} = X^{(k+1)} + \beta \times (X^{(k+1)} - X^{(k)})$$

• Until Convergence

 $\hat{X} = Prox_{\lambda}(X)$ is singular value thresholding operator of X.