1145-15-2681　　　　**Aritra Dutta** and **Xin Li*** (`xin.li@ucf.edu`), 4000 Central Florida BLVD, Orlando, FL 32816.
A fast weighted singular value thresholding method. Preliminary report.

Singular value thresholding (SVT) plays an important role in many low rank matrix approximation algorithms that have many applications in machine learning, pattern recognition, and computer vision. In this talk, we propose a new fast algorithm to solve a weighted version of the singular value thresholding problem (WSVT) which uses a combination of the nuclear norm and a weighted Frobenius norm. We will also give a survey on the various version of generalized or weighted variants of SVT in the current literature. (Received September 25, 2018)