

1096-15-915

**Viktoriya Taroudaki\*** (victtar@math.umd.edu) and **Dianne P. O'Leary**. *Image estimation using optimal filters*. Preliminary report.

The image restoration is a challenging inverse problem. Solutions involving filters have been proposed. In the past we have used statistical analysis and observed properties of the noise to estimate the optimal parameter for the truncated SVD filter. In this work, we extend this analysis to other known filters such as the TSCM, the Truncated Tikhonov, and to combinations of them. The resulting restorations compare favorably to those using parameters estimated through well studied methods and are not much different from restorations using the true (generally unknown) optimal parameter. (Received September 11, 2013)