

Meeting: 1003, Atlanta, Georgia, SS 36A, AMS-SIAM Special Session on Mathematical Image Processing, I

1003-65-1182 **Bradley J. Lucier*** (lucier@math.purdue.edu), Department of Mathematics, Purdue University, 150 North University Street, West Lafayette, IN 47907-2067, and **Antonin Chambolle**, CEREMADE (CNRS UMR 7534), Université de Paris–Dauphine, Paris, France.
YAWTSI: Yet Another Way To Smooth Images (and keep edges). Preliminary report.

We show the results of two algorithms for $B_\infty^1(L_1)$ variational smoothing, one based on wavelets (similar to Wavelet Shrinkage for $B_1^1(L_1)$ smoothing) and one based on pixel values (similar to Chambolle's method for BV smoothing). Experiments show that the qualitative properties of the smoothed images depend critically on the form of the $B_\infty^1(L_1)$ seminorm that one uses in the variational problem. (Received October 04, 2004)