1046-62-699 **Veera Holdai*** (vxholdai@salisbury.edu), 1101 Camden Ave., Salisbury, MD 21801, and **Alexander Korostelev** (apk@math.wayne.edu). *Image Reconstruction in Multi-Channel Model under Gaussian Noise.*

The image reconstruction from noisy data is studied. A nonparametric boundary function is estimated from observations in a growing number, N, of independent channels in the Gaussian white noise. In each channel, the image and the background intensities are unknown. They define a set of unidentifiable nuisance parameters that slow down the typical minimax rate of convergence. The asymptotically minimax rate is found as $N \to \infty$, and an asymptotically optimal estimator of the boundary function is suggested. (Received September 10, 2008)