1005-45-205 **Paul Eggermont*** (`eggermon@udel.edu`), Food and Resource Economics, 531 South College Avenue, University of Delaware, Newark, Delaware 19717-1303. *Statiscal treatment of noisy data in maximum entropy regularization of Fredhold integral equations of the first kind.* Preliminary report.

We consider maximum entropy regularization of Fredhold integral equations of the first kind with noisy discrete data. The noise is treated by means of reproducing kernel Banach space methods. Under suitable condtions, it is shown that the L_1-error of the regularized solution tends to zero as the sample size tends to infinity. (Received February 11, 2005)