



The University of Chicago  
Department of Statistics  
Seminar Series

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**“Nonparametric Linear Models with Endogenous Regressors”**

**MONDAY, October 23, 2006 at 4:00 PM**  
**133 Eckhart Hall, 5734 S. University Avenue**  
*Refreshments following the seminar in Eckhart 110.*

**ABSTRACT**

In the nonparametric linear model  $Y = f(X) + \epsilon$ , where  $f$  is an unknown function and  $E(\epsilon|X) = 0$ ,  $f(X) = E(Y|X)$ . However, if  $X$  is endogenous, then the assumption  $E(\epsilon|X) = 0$  may not hold and, hence, the interpretation of  $f$  as a conditional expectation may not be valid. In this talk, I will consider a general form of nonparametric linear model with endogenous regressors. Conditions required for the identification of the unknown function and the mapping relating that function to the distribution of the observed random variables will be considered; in particular, the case in which the unknown function is not identified will be discussed in detail.

This work is joint with G. Tripathi.