

**ANALYSIS SEMINAR**

**THE RADON-NIKODYM PROPERTY**

**FOR THE PROJECTIVE TENSOR PRODUCT**

**OF KÖTHE FUNCTION SPACES**

QINGYING BU

WEDNESDAY, OCTOBER 13, 2004 IN ROOM 331 AT 3:00 PM

*ABSTRACT Let  $E$  be an order continuous Köthe function space and  $X$  be a Banach space. We first show that  $E \hat{\otimes} X^*$ , the projective tensor product of  $E$  and  $X^*$ , semi-embeds into  $E(X^*)$ , the Köthe-Bochner function space. Then by this we show that  $E \hat{\otimes} X^*$  has the Radon-Nikodym property if and only if both  $E$  and  $X^*$  do. (This is a joint work with Dr. Pei Kee-Lin)*