MATHEMATICAL STATISTICS FALL 2012

Instructor:	Prof. Ruibin Xi
Office:	理科一号楼 1475W
TA:	夏禹超
Website:	http://www.math.pku.edu.cn/teachers/xirb/Courses/QR2013.html
Email:	ruibinxi AT math DOT pku DOT edu DOT cn
Office hour:	TBA
Class Room Lecture:	三教 505 周二：3-4 节 三教 505 周四：5-6 节 三教 505（双周）
Text book:	None
Topics covered:	Compared to the classic mean-based regression, quantile regression (QR) is more robust and can provide more comprehensive. Its value has been demonstrated by applications in many fields including econometrics, social sciences, and biomedical studies. In this class, we will cover basic topics of QR as well as some selected recent development about QR. The topics include QR models, statistical inferences in QR, computation of QR, Bayesian QR, asymptotic property of QR and some applications of QR models.
Prerequisite:	We assume familiarity of linear regression model. Students should also have basic knowledge about statistics and probability theory.
Exams:	Literature Reading + Oral Presentation
Final Score:	Homework 20%; Final 80%
Reference Books:	Quantile Regression (Roger Koenker) Approximation Theorems of Mathematical Statistics (Robert J. Serfling)