

University of Macau

Faculty of Science and Technology

Department of Mathematics

FST-SEM/00054/2015

End-point sampling

By

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Date: 15 May 2015 (Friday)

Time: 10:30 a.m. - 11:30 a.m.

Venue: E11- 1040

Abstract

Retrospective sampling designs, including case-cohort and case-control designs, are commonly used for failure time data with censoring. In this talk, we propose a new retrospective sampling design, called end-point sampling, which improves the efficiency of the case-cohort and case-control designs. The regression analysis is conducted using the Cox model and the maximum likelihood approach, with the computational aid from the EM algorithm. The resulting estimator is proved to be consistent, asymptotically normal and semiparametrically efficient. Simulation and real data studies with comparisons between the proposed sampling design and ordinary sampling designs will be presented.

Biography

Dr. Yao Yuan got her PhD degree in Statistics from Hong Kong University of Science and Technology in 2011, currently she is a research assistant professor of Department of Mathematics, Hong Kong Baptist University. Her research interests include Survival analysis, High-dimensional data analysis, Empirical processes, Large sample theory.

All are Welcome!

Reminder - FST Seminar - MAT – “End-point sampling” at 10:30am on 15 May 2015 (Friday), E11-1040