SAPIENZA
UNIVERSITÀ DI ROMA

Luca Tardella <luca.tardella@uniroma1.it>

[Forum SIS] Annuncio di Seminario: prof. Partha Lahiri
1 messaggio

Serena Arima <serena.arima@uniroma1.it>   24 novembre 2017 13:24
A: SIS mailing list <sis@stat.unipg.it>

Tuesday 5th December at 11.00 am

Title: "The role of jackknife in small area estimation"

Venue: Room B, floor 4th, Dep. MEMOTEF, Faculty of Economics, Sapienza University of Rome

via del Castro Laurenziano, 9

Roma

Speaker: Partha Lahiri, Joint Program in Survey Methodology and Department of Mathematics, University of Maryland, College Park

Abstract: There is a growing demand from various federal and local government agencies to produce high quality estimates on a wide range of characteristics for a target population and its different small subgroups. These estimates are often produced using by an empirical best prediction method that uses an appropriate mixed model in combining survey data with various related administrative and census data. This statistical approach has the potential to reduce cost in producing small area statistics as it takes advantage of the existing databases instead of requiring new costly survey data collection. The small area estimates are useful in assessing the well-being of a nation in terms of various socio-economic and health issues and taking remedial measures to improve on the situation, if necessary.

A second-order unbiased mean square prediction (MSPE) error estimation has been one of the challenging problems in small area estimation for over thirty years. Various approaches have been proposed in the literature. In this talk, I will first review the jackknife method in small area estimation, including the recently proposed Monte-Carlo jackknife method (McJack) in incorporating additional uncertainty due to model selection.
This talk is based on my collaborative research with my longtime collaborator Professor Jiming Jiang, my former PhD students Drs. Shijie Chen and Shu-Mei Wan Jiming Jiang, and Professor Thuan Nguyen .

Short Bio

Dr. Partha Lahiri is Professor of the Joint Program in Survey Methodology (JPSM) and Department of Mathematics at the University of Maryland at College Park, and an Adjunct Research Professor of the Institute of Social Research, University of Michigan, Ann Arbor. Prior to coming to Maryland, Dr. Lahiri was the Milton Mohr Distinguished Professor of Statistics at the Universìty of Nebraska-Lincoln. His research interests include survey sampling, official statistics, and small-area

estimation. Dr. Lahiri's research on small area estimation has been widely published in leading journals such as the *Journal of the American Statistical Association, Annals of Statistics, Biometrika* and *Survey Methodology.* Dr. Lahiri has served on a number of advisory committees, including the U.S. Census Advisory committee and U.S. National Academy panel. Over the years Dr. Lahiri advised various local and international organizations such as the United Nations Development Program, World Bank, Gallup Organization. Dr. Lahiri regularly teaches semester-long small area estimation course at JPSM. In addition, he offered short courses, workshops and a webinar on small area estimation in different countries. Dr. Lahiri is a Fellow of the American Statistical Association and the Institute of Mathematical Statistics and an elected member of the International Statistical Institute.

_____
Sis mailing list
Sis@stat.unipg.it
http://www.stat.unipg.it/mailman/listinfo/sis