C R Rao Advanced Institute of Mathematics, Statistics & Computer Science (AIMSCS)

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Seminar

on

Proxy Samples in Time Series

by

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Abstract: Inference for statistics of a stationary time series often involve nuisance parameters and sampling distributions that are difficult to estimate. In this paper, we propose the method of proxy samples, which can be used to address some of these issues. For a broad class of statistics, using the original data, a proxy sample is constructed by making a slight modification of the original statistic, such that it shares similar distributional properties as the centralised statistic of interest. We use the proxy sample to estimate nuisance parameters and the finite sample distribution of the test statistics, focusing on Portmanteau and Goodness of Fit tests. The proposed method is simple and computationally fast to implement.

Brief Biodata of Dr. Suhasini Subba Rao

Dr Suhasini Subba Rao presently working as Associate Professor in the Department of Statistics, Texas A& M University, USA. Before joined the Department of Statistics she was at the University of Bristol before which she was part of Statlab at the University of Heidelberg.
She did her undergraduate degree at the University of Manchester and obtained her PhD from the University of Bristol. Her research interests includes Time series, nonstationary processes, nonlinear processes, recursive online algorithms, spatio-temporal models.

Date and time : 03rd June 2015, Wednesday at 03:30 pm

Venue: Ramanujan Building, C R Rao AIMSCS

There is no registration fee and all are invited.