**Outline** **of** ***Lectures at the Beijing Normal University***

**D.S. Prasada Rao**

The University of Queensland

Lecture 1: Index Number Methods: An introduction to Axiomatic and Economic Approaches to Price Index Numbers and Real Expenditure Comparisons

Lecture 2: Methods for Spatial comparisons: Base Invariance; Transitivity; Additivity; Charactersiticity; Representativity versus comparability; Axiomatic approach; Overview of ICP

Lecture 3: Gini-Elteto-Koves-Szulc Method for international comparisons; Comparisons below the Basic Heading level – GEKS method and its variants used by Eurostat; Aggregation above the basic Heading Level – GEKS Method based on Fisher and Tornqvist indices (Caves-Christensen-Diewert indices)

Lecture 4: Geary-Khamis System for Multilateral Comparisons; Properties including Additivity; Existence and Solutions; The Rao system; Ikle Method; The Neary-system and the general equilibrium approach to international comparions; Feenstra-Rao system for real price comparisons; Feenstra-Heston-Timmer – Real Expenditure Comparisons

Lecture 5: Stochastic Approach to Index Numbers – Rao and Selvanathan approach; Stochastic Approach based on the CPD Model; Unweighted and weighted CPD models; Aggregation below and above basic heading levels; CPD and PPP computation

Lecture 6: Spatial chanining methods; reliability of binary comparisons; spatial chaining using minimum spanning trees; minimum distance paths; price and quantity similarity methods

Lecture 7: Extrapolation of PPPs – various approaches; PWT 7.1, 8.0, World Development Indicators; UQICD; Consistency between benchmarks

Lecture 8: Computation of Regional and global inflation and growth

Lecture 9: Discussion on other research topics