

**Cyprus University of Technology**

***Department of Commerce, Finance and Shipping***

***Seminar Talk***

Friday 27th of November, 2015, 17:30 – 18:15

(Conference Room, 2nd floor, Continental Building)

**“Hypothesis testing about the expected value of random intervals”**

**by**

**Ana Colubi**

**(University of Oviedo, Spain)**

Abstract

Random intervals will be considered as natural interval data generating elements. A framework based on distances and the set-arithmetic useful to handle interval data from an `ontic' perspective will be reviewed. The focus will be on the two main parameters within this framework: The Aumann expected value and the Frechet variability. The distance-based approach makes it natural to develop some inferences, e.g. asymptotic and bootstrap techniques for the one-sample, the 2-sample and the k-sample cases. However, the extensions of these classical tests are not enough to handle interval data, which are richer in some senses. To illustrate this, partial and full inclusion tests for the Aumann expectation will be developed and the theory behind will be discussed. Empirical results based on simulations and a case-study will also be considered for illustrative purposes.

Department of Commerce, Finance and Shipping

115, Spyrou Araouzou Street, 3606, P.O.Box. 50329, 3603, Lemesos

Tel. 25002489 Fax. 25002637 Email. cfs.seminars@cut.ac.cy