

**Cyprus University of Technology**

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

***Seminar Talk***

Tuesday 28th of July 2015, 12:00-13:00

(Conference Room, 2nd floor, Continental Building)

**“Estimation of Multiple Linear Regression Models with Random Linear Constraints”**

**by**

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Abstract

The least-squares estimation of linear regression models involves an optimization problem that may be subject to a certain group of constraints. The well-known constrained least-squares approach assumes that the number of inequality linear constrains is xed. This framework will be extended by removing such an assumption. Thus, the number of constrains can vary depending on the sample size. Different estimators will be presented and their consistency will be discussed. A motivation of the interest of such a problem is found in the context of linear regression with interval data, which will be analysed in detail as a important particular case. Finally, it will be shown that the approach can be extended to the abstract case of regression models in Hilbert spaces, which accommodates as well more complex data, such as functional data.

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