



UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

INSPEM WEEKLY SEMINAR

37/2018

Date & Time

2nd November 2018, Friday @ 3.15 pm

Venue

**Al-Farabi Seminar Room, Second Floor,
INSPEM**

Presenter

Dr. Azadeh Zahedi Khameneh

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Topic

Some Developments of Aggregation Operators

Abstract

Aggregating data is basic issue for all kinds of knowledge-based systems, from decision-making to machine learning. The purpose of aggregation is to convert a collection of objects all belonging to a given set into a single representative object of the same set. There is a long list of aggregation techniques in literature, developed for quantitative and qualitative information based on different methodologies, such as probability theory and fuzzy set theory. However, ultimately, all these techniques deal with numerical variables. In other words, we need to develop aggregation methods for numerical values which means numerical aggregation operators play a key role. Generally, aggregation operators (functions) are mathematical tools for reducing a sequence of numbers into a unique number. For example, the average and median as well as their classical extensions i.e., the weighted mean and the k-order statistics; and the minimum and maximum are some often used aggregation operators. In this seminar, we focus on mathematical aspects of numerical aggregation operators not aggregation or fusion of knowledge and rules. We also present a catalogue of some existing operators with their characteristics.