HACETTEPE ÜNİVERSİTESİ MATEMATİK BÖLÜMÜ
GENEL SEMİNERİ

(HACETTEPE UNIVERSITY MATHEMATICS
GENERAL SEMINAR)

Tarih (Date): 06.01.2016, Çarşamba (Wednesday)

Saat (Time): 15:00

Yer (Place): Yaşar ATAMAN Seminer Salonu

Konuşmacı (Speaker): Mohammad Marabeh, ODTÜ

Başlık (Title): Unbounded Order Continuous Operators

Özet (Abstract):

A linear operator between two Riesz spaces E and F is said to be unbounded order continuous (or uo-continuous, for short) whenever it maps each unbounded order null net in E into an unbounded order null net in F, and it said to be-unbounded order continuous (or uo-continuous, for short) if each unbounded order null sequence in E is mapped into an unbounded order null sequence in F. We begin this talk by a review of some basic notions and results from the theory of Riesz spaces. Then we will recall the unbounded order convergence"(abbreviated, uo-convergence) of nets in Riesz spaces, and demonstrate some recent characterizations of it. Later we will give some properties of uo-continuous and uo-continuous operators. We will also characterize the uo-continuous (respectively, uo-continuous) dual of some well-known Riesz spaces. Finally, as an application of uo-convergence and uo-continuity we establish two variants of Brezis-Lieb lemma in Riesz spaces. PS: This work is a part of ongoing thesis under supervision of Prof. Eduard Emelyanov, Orta Dogu Teknik Universitesi (ODTU).