



**HACETTEPE ÜNİVERSİTESİ MATEMATİK BÖLÜMÜ
GENEL SEMİNERİ**

**(HACETTEPE UNIVERSITY MATHEMATICS
GENERAL SEMINAR)**

Tarih (Date) : 18.11.2015, Çarşamba (Wednesday)

Saat (Time): 15:00

Yer (Place): Yaşar ATAMAN Seminer Salonu

Konuşmacı (Speaker): Prof. Dr. Allaberen Ashyralyev (Fatih, İstanbul ve ITTU, Ashgabat)

Başlık (Title) : A survey of results in the investigation of the structure of fractional spaces generated by positive operators in Banach spaces

Özet (Abstract) : The role played by positivity property of differential and difference operators in Hilbert and Banach spaces in the study of various properties of boundary value problems for partial differential equations, of stability of difference schemes for partial differential equations, and of summation Fourier series is well-known (see, [1]-[3]). This is a review paper on results for fractional spaces generated by positive operators. Its scope ranges from theory of differential and difference operators in a space to operators with local and nonlocal boundary conditions. We also discuss their applications to partial differential equations and theory of difference schemes for partial differential equations.