Abstract: It is very well-known that every composition operator on Hardy spaces of the unit disc is bounded whereas the boundedness of composition operators on Hardy spaces of the half-plane is not always possible. In 1999 Matache characterized the boundedness of composition operators of the half-plane in terms of Carleson measures. In 2012 M. Jury and S. Elliott, using the theory of positive kernels, found a geometrical criterion in terms of the derivative of the inducing function at infinity for the boundedness of composition operators of the half-plane. In this talk we will survey the result of Jury and Elliott. I will give a brief introduction to the theory of positive kernels. We will also discuss the possibility of extending the method of Jury and Elliott to Hardy spaces of the poly-disc.

Date: January 3, 2014
Time: 15:40
Place: Sabancı University, Karaköy Communication Center
Bankalar Caddesi 2, Karaköy 34420, İstanbul

İstanbul Analysis Seminars is supported by TÜBİTAK 2217.