

ANALYSIS & APPLICATIONS seminar

INVARIANT SUBSPACES FOR BISHOP OPERATORS

SPEAKER: Adrián Ubis (UAM)

DATE: Thursday, 7 March 2019 - 14:30

VENUE: Aula 520, Módulo 17, Departamento de Matemáticas, UAM

ORGANISER: UAM-ICMAT

ABSTRACT: In the fifties Bishop proposed the family $T_\alpha f(x) = xf(\{x+\alpha\})$ acting on $L^2[0; 1)$ as a possible source of operators without invariant subspaces. Years later Davie showed that T_α actually has invariant subspaces whenever α is not a Liouville number (so for almost all α).

In this talk I will speak about recent work with F. Chamizo, E. Gallardo and M. Monsalve in which we extend Davie's method to some Liouville numbers α and show that these techniques cannot work for every α .