

Dilluns 23 d'abril del 2012, 15:00h

Aula petita del CRM.

Sharp Békollé estimates for the Bergman projection.

MARI CARMEN REGUERA

University of Lund (Sweden)

ABSTRACT:

Finding sharp estimates in terms of the Muckenhoupt A_p constant for singular integrals on weighted Lebesgue spaces has attracted a lot of attention lately. In the same spirit, we look for analogous estimates for the Bergman projection on the disc \mathbb{D} . The class of weights on \mathbb{D} for which the Bergman projection P extends to a bounded linear operator on weighted spaces $L^p(w, \mathbb{D})$ is the so called Békollé-Bonami class and it is usually denoted by B_p . In this talk, we find the linear bound for the Bergman projection in terms of the B_2 constant. The proof will consider a novel dyadic model for the Bergman projection. This is joint work with Alexandru Aleman and Sandra Pott.