

Bergman projection induced by radial weight and Littlewood-Paley

Jouni Rättyä

University of Eastern Finland, P.O.Box 111,

80101 Joensuu, Finland

jouni.rattya@uef.fi

If ω is a radial weight on the unit disc, it makes sense to consider the orthogonal Bergman projection $P_\omega : L_\omega^2 \rightarrow A_\omega^2$, where A_ω^2 is the weighted Bergman space induced by ω . Given $p \in (1, 2) \cup (2, \infty)$, Dostanić [1] posed the question of describing the radial weights ω such that P_ω is bounded on L_ω^p . In this talk, several results concerning this problem will be presented as well as connections with Littlewood-Paley formulas.

REFERENCES

- [1] M. R. Dostanić, Unboundedness of the Bergman projections on L^p -spaces with exponential weights, Proc. Edinb. Math. Soc. (2) 47 (2004), 111–117.