Weak normal classes of substitution operators

Mohammad Reza Jabbarzadeh^{a,b} ^a Department of Mathematics, Faculty of Mathematical Sciences, University of Tabriz-Iran ^b <u>mjabbar@tabrizu.ac.ir</u>

Abstract: In this article, we discuss measure theoretic characterizations for weighted composition operators in some operator classes on $L2(\Sigma)$ such as, n-power normal, n-power quasi-normal, k-quasi-paranormal and quasi-class A. Then, we show that weighted composition operators can separate these classes.

Keywords: conditional expectation, weighted composition operator, n-power normal, k-quasi-paranormal

References:

[1] C. Burnap and I. Jung, Composition operators with weak hyponormalities, J. Math. Anal. Appl., vol. 337, pp. 686-694, 2008.

[2] C. Burnap, I. Jung and A. Lambert, Separating partial normality classes with composition operators, J. Operator Theory, vol. 53, pp. 381-397, 2005.

[3] J. Campbell and J. Jamison, On some classes of weighted composition operators, Glasgow Math. J., vol. 32, pp. 87-94, 1990.

[4] M. R. Jabbarzadeh and M. R. Azimi, Some weak hyponormal classes of weighted composition operators, Bull. Korean. Math. Soc., vol. 47, pp.793-803, 2010.