Mean ergodicity of multiplication operators in weighted Dirichlet spaces

Antonio Bonilla

Universidad de La Laguna

We study the bounded multiplication operators in weighted Dirichlet spaces that are power bounded, Cesàro bounded and mean ergodic. Moreover, we show the equivalence in such spaces between mean ergodicity and Cesàro boundedness for multiplication operators. We perform the same study for adjoints of multiplication operators. As a particular example, we obtain a mean ergodic multiplication operator in Dirichlet spaces that fails to be power bounded.

References

[1] A. Bonilla, D. Seco, Mean ergodicity of multiplication operators in weighted Dirichlet spaces, arXiv:2503.03678

17 Jun 15:35