

Hypercyclicity of Weighted Backward Shifts on Spaces of Real Analytic Functions

Can Deha Karıksız

Özyeğin University

In this joint work with Paweł Domański, we give certain conditions on hypercyclicity of the weighted backward shift operators

$$B_w : A(\Omega) \rightarrow A(\Omega),$$

with weight sequences $w = (w_n)_{n \in \mathbb{N}}$, acting on the spaces of real analytic functions $A(\Omega)$ on open subsets Ω of \mathbb{R} containing zero, that send the monomials x^n to $w_n x^{n-1}$ for all $n \in \mathbb{N}$ and the unit function to the zero function.