

On characterizations of asymmetric truncated Toeplitz operators

Kamila Kliś-Garlicka

Consider two nonconstant inner functions α and θ such that α divides θ . For a function $\varphi \in L^2$ we can define an asymmetric truncated Toeplitz operator

$$A_\varphi: H^2 \ominus \theta H^2 \rightarrow H^2 \ominus \alpha H^2$$

by the formula $A_\varphi f = P_\alpha(\varphi f)$, where $P_\alpha: L^2 \rightarrow H^2 \ominus \alpha H^2$ is the orthogonal projection. During the talk we will investigate some properties of bounded asymmetric truncated Toeplitz operators with L^2 symbols. In particular, we will give two characterizations of such operators in terms of specific operators of rank two.

This is joint work with J. Blicharz, C. Câmara and M. Ptak.