Hans Jarchow, (Zürich, Switzerland)

Compactness properties of multiplication operators

We present several characterizations of weak compactness and complete continuity of multiplication operators acting on spaces like $L^1(\mu)$, $L^{\infty}(\mu)$, and the classical Hardy space H^1 . We also indicate how these results generalize to multiplication operators on general von Neumann algebras, their preduals, etc.