
IEVGEN BILOKOPYTOV, University of Manitoba

Which multiplication operators are surjective isometries?

Let \mathbf{F} be a Banach space of continuous functions over a connected locally compact space X . We present sufficient conditions on \mathbf{F} guaranteeing that the only multiplication operators on \mathbf{F} that are surjective isometries are scalar multiples of the identity. The conditions are given via the properties of the inclusion operator from \mathbf{F} into $\mathcal{C}(X)$, as well as in terms of geometric conditions on \mathbf{F} . An important tool in our investigation is the notion of Birkhoff Orthogonality.