

Bounded convergence theorems

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The lecture will be devoted to certain results on extending continuous linear operators defined on spaces of E -valued continuous functions (defined on a compact Hausdorff space X) to linear operators defined on spaces of E -valued measurable functions. As an application, a new description of uniform closures of convex subsets of $C(X, E)$ shall be given. Also new and strong results on integral representations of continuous linear operators defined on $C(X, E)$ will be discussed and new classes of vector measures and various bounded convergence theorems will be introduced.