

Korovkin approximation of set-valued functions

Michele Campiti^a

^a Department of Mathematics and Physics "E. De Giorgi", University of Salento (Italy)

michele.campiti@unisalento.it

In 1988, Keimel and Roth [5] have established the analogous of the classical Korovkin theorem in the setting of cones of set-valued Hausdorff continuous functions. After this paper, many Korovkin-type results have been obtained even by introducing particular classes of monotone operators (see [1, 2]). In this talk we present different results obtained in the last years also in connection with the Korovkin approximation of vector-valued continuous functions [3].

We also consider cones of integrable set-valued functions and obtain the existence of Korovkin systems which may include integrable set-valued functions which are not Hausdorff continuous [4].

Some applications to classical sequences of Kantorovich and Bernstein-Durrmeyer type operators in the set-valued setting are also considered.

References

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