

The first part of the thesis presents the basics of Choquet theory of function spaces needed in the next part. Text deals mainly with general function spaces, the special case of compact convex sets is considered only marginally. The main object of this investigation is an equivalence between simpliciality and some interpolation properties of a function space. The second part is engaged in research on products of function spaces. Various products are defined, the most treated being the multiaffine product. The introductory section focuses just on the connections and differences between these products. The primary goal of the work is a generalization of known results for products of compact convex sets to the context of function spaces. First, extremal sets are examined, the main result is the representation of Choquet boundary of a product space as the product of Choquet boundaries of original spaces. Simplicial spaces are studied next. It is shown, that a product of simplicial spaces is simplicial and in that case established definitions of a product space coincide for affine functions. Finally, maximal measures are investigated.