

Linearization of non-linear functions

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In Banach space theory the most prominent class of functions are the continuous linear mappings since they preserve the structure of the underlying spaces. When dealing with a space of non-linear functions, it is convenient to apply a procedure that associates it with a space of linear mappings (defined on a more complex domain). In this course we present some characteristics of a general procedure and then focus on the linearization of spaces of bilinear mappings, homogeneous polynomials and bounded holomorphic functions.