III. General transformation theory

In: Otakar Borůvka (author); Felix M. Arscott (translator): Linear Differential Transformations of the Second Order. (English). London: The English Universities Press, Ltd., 1971. pp. [195].

Persistent URL: http://dml.cz/dmlcz/401692

III General transformation theory

Up till now we have encountered the transformation problem exclusively with reference to oscillatory differential equations (q), (Q) (§§ 13.5, 20.6).

In this third part we shall be concerned with the transformation problem for arbitrary differential equations (q), (Q). Our study will be divided into two parts, according to the assumptions which are made with regard to the transforming function. In the first chapter we shall be concerned with general transformations in which the transforming function is in general not restricted by any conditions. The second chapter will contain the theory of so-called complete transformations. These are characterized by the fact that the intervals of definition and the ranges of their kernels coincide with the intervals of definition of the differential equations (q), (Q).