

# Linear Differential Transformations of the Second Order

---

## IV. Recent Developments of 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. [225].

Persistent URL: <http://dml.cz/dmlcz/401699>

### Terms of use:

© The English Universities Press, Ltd.

Institute of Mathematics of the Czech Academy of Sciences provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This document has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://dml.cz>

## IV Recent Developments of Transformation Theory

Since the appearance, in 1967, of the German edition of this book there has been an extensive development of transformation theory and of parts of the theory of Jacobian differential equations connected with it. In particular, an abstract algebraic model of the transformation theory of oscillatory Jacobian differential equations has been constructed; resulting from this progress, attacks have been made on various problems which, while originating in dispersion theory, are also geometrical in nature.

In this Part, consisting of sections 28 and 29, we shall endeavour to present a survey of these recent developments. Section 28 is devoted to the construction—given in detail as it has not been published elsewhere—of the abstract transformation model mentioned above, and to its realization in the analytical case. Section 29 contains a survey of recent progress in various parts of the theory of Jacobian differential equations, which have an impact on transformation theory; it also reviews the relevant literature.

Most of the references in this Part are to the supplementary bibliography on pp. 248–9 these references are indicated by an asterisk.