In (5) we have the equations of two lines different for different values of t, and the locus of their intersection is the  $R^2$ . In (14) we have three concurrent variable lines, and the locus of their intersection is the  $R^3$ . Hence in general the method consists in finding the locus of the points of concurrence of nconcurrent lines subject to the condition that this point of concurrence be on the  $R^n$ .

PENNSYLVANIA STATE COLLEGE, February, 1917.

## FORD'S STUDIES ON DIVERGENT SERIES AND SUMMABILITY.

Studies on Divergent Series and Summability. By WALTER BURTON FORD. Michigan Science Series, Volume II. New York, The Macmillan Company, 1916. xi + 194 pp.

DURING the past twenty years there has been an ever increasing interest in the study of divergent series and their applications. Naturally a coexistent phenomenon has been a very large expansion in the volume of literature on this subject. An idea of the amount of this expansion may be gathered from the bibliography of Professor Ford's book, which, while not exhaustive, contains a list of some two hundred books and memoirs (principally memoirs), of which all but about twenty have appeared from 1895 on.

Thus it has become more and more difficult for one who has not followed recent work on divergent series to ascertain readily the known results in a certain branch of that field or the methods that have proved fruitful in studying certain aspects of the subject. This is alike a handicap for the experienced research worker whose investigations in other fields have naturally led to a consideration of divergent series, and to the beginner in research who feels attracted toward the subject of divergent series and wishes to orient himself rapidly in the field in order to find the avenues that may lead to new results.

To both of these classes of readers, as well as to many others, Professor Ford's admirable work will undoubtedly prove a boon. It presents in clear and concise fashion the fundamental features of each of the two grand divisions of divergent series, namely, asymptotic series and summable series, and in

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