"weighted" (belastete) orthogonality: $V_1(1)\,V_2(1)+\int_0^1 V_1(x)\,V_2(x)\,dx=0$. Theorems analogous to the usual ones are indicated.

The bibliography in the appendix should not be overlooked. While it lays no claim to completeness, it is particularly valuable in the field of the applications. Its extent has been nearly doubled in the new edition.

The additions have materially enhanced the value of the book, and the chapter on the theory of the symmetric kernel has helped to meet Hurwitz' criticism as to the confusing effect of frequent alternation of general theory and particular examples. But only partially so, for as a rule several pages must be read before one can ascertain the precise conditions for the validity of a theorem, and in some cases the reader must bring an independent judgement to bear on his quest (e. g. on p. 38, line 19; the functions must be continuous and have *continuous* derivatives of first and second orders as well as piecewise continuous derivatives of third and fourth orders if the reasoning indicated is to establish the stated results). The style is further complicated by the habit of deferring the statement of a theorem until after its proof. Thus is imposed upon the attention of the reader the double task of following the reasoning and endeavoring to determine its import. Nor is much help given him by preliminary elucidation as to the general goal or the salient features of the discussion to follow.

The lacuna pointed out by Hurwitz in the proof of the theorem that to a solution of a homogeneous integral equation there always corresponds a solution of the associated equation has been allowed to stand; the section has been reprinted with such fidelity that a confusing typographical error recurs (p. 249, line 16: "Gleichung (7)" should read "Gleichung (3)").

The preparation requisite for a profitable reading of this book includes a knowledge of the rudiments of integral equations, some acquaintance with differential equations, with the theory of functions, and with physics; above all some mathematical maturity is essential. For one so equipped it is highly interesting and suggestive. Certainly no one who has to lecture on integral equations can afford to be unacquainted with its contents.

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Introduction à la Théorie de la Relativité, Calcul Différentiel Absolu, et Géométrie. By H. Galbrun. Paris, Gauthier-Villars et Cie., 1923. x+457 pp.

This work is a rather complete treatment of the mathematics of the relativity theory. Three chapters, about 100 pages, are devoted to a systematic and detailed exposition of the method of the absolute differential calculus. The differential geometry of n-dimensional space is allotted four chapters including slightly over 150 pages. The remainder of the book is devoted to mechanical and electromagnetic