

# SINGULAR LEBESGUE-STIELTJES INTEGRAL EQUATIONS.

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## 1. Introduction.

The theory of integral equations, broadly outlined, consists, on the one hand, of developments which could be generally classed as of Fredholm type and which may be based on Lebesgue integration; in this connection of particular interest are symmetric kernels, when the characteristic values are real and the characteristic functions form an orthogonal set. On the other hand, there exist developments relating to kernels for which the theory of Fredholm type does not apply and which entail results of form essentially distinct from that involved in the Fredholm theory — prominent in this respect are the names of H. WEYL<sup>1</sup> and

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<sup>1</sup> H. WEYL, *Singuläre Integralgleichungen mit besonderer Berücksichtigung des Fourierschen Integraltheorems*, Göttingen, 1908; pp. 1—86.