

PROBLEMS OF REPRESENTATION AND UNIQUENESS FOR FUNCTIONS OF A COMPLEX VARIABLE.

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1°. **Introduction.** This work is essentially a continuation of the function-theoretic developments, which the present author undertook in two extensive memoirs, *in the sequel referred to as (T_1) ¹ and (T_2) ²*, respectively. In order to save space it will be assumed that the reader is familiar with the main ideas and principles involved in those two works.

We shall first establish a number of theorems relating to the representation of classes of functions (of a complex variable), characterized by certain descriptive properties, by integrals of the form

$$(1^\circ. 1) \quad \int \int \frac{d\mu(e_\zeta)}{\zeta - z}, \quad \int \int \log(\zeta - z) d\mu(e_\zeta) \quad (z = x + iy),$$

¹ W. J. TRJITZINSKY, *Théorie des fonctions d'une variable complexe définies sur des ensembles généraux*, Ann. Ec. Norm., (3), LV, Fasc. 2, pp. 119—191.

² W. J. TRJITZINSKY, *Some general developments in the theory of functions of a complex variable*, Acta mathematica, vol. 70 (1938), pp. 63—163.