

single segment of length ρ forming an angle $\phi \neq 0, \pi$ with the real axis, or the slit may lie on the real axis with the pieces of absolute value ≤ 1 identified with each other, in which case the slit appears as a fork with end points α, β . Accordingly, the boundary of V_3 consists of one surface corresponding to the parameters ρ, ϕ , and another surface with the parameters α, β .

The last chapter, written by Arthur Grad, gives an explicit determination of the region of values taken by $f'(z)$ at a fixed point z . It is an excellent illustration of the method in a case different from but of the same degree of difficulty as the determination of V_3 . The reader who is anxious to learn the technique from the point of view of actual application will find this chapter most rewarding.

The authors can be congratulated on the accurate work they have accomplished. Great professional skill and painstaking detailed analysis are dominating features throughout the book. Books of this sort are never easy to read, and they offer little to the impatient skimmer. This book is definitely written by conscientious authors for conscientious readers.

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BRIEF MENTION

Funzioni quasi-periodiche. By S. Cinquini. (Scuola Normale Superiore, Pisa, Quaderni Matematici, no. 4.) Pisa, Tacchi, 1950. 132+7 pp.

The class of Bohr almost periodic functions includes in particular the subclass of exponential polynomials $\sum a_n e^{i\lambda_n x}$, and Bohr's uniqueness theorem states that the whole class arises from the subclass on closing the latter by the norm

$$(1) \quad \|f\| = \sup_{-\infty < x < \infty} |f(x)|.$$

In the periodic case this corresponds to the C -functions, and the so-called generalizations of almost periodic functions are various modes for introducing closure norms that would give the analogues to all L_p -functions as well. The narrowest such generalization known is due to Stepanoff, and it uses the norm

$$(2) \quad \|f\| = \sup_{-\infty < x < \infty} \left(\int_0^l |f(x + \xi)|^p d\xi \right)^{1/p}$$

for some (and hence any) finite length l ; the purpose of the present tract is to give an account of the theory that would feature the Stepanoff functions in the main.