

*On the Singularities of Solutions of Differential Equations of the Elliptic Type**

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1. Introduction. We consider partial differential equations of the elliptic type

$$(1.1) \quad \mathbf{L}(u) \equiv \frac{1}{4}\Delta u + \frac{1}{2}Au_x + \frac{1}{2}Bu_y + Cu = 0$$

where A, B, C are assumed to be entire functions of x and y (even when continued to complex values).

In the present paper we show that subsequences $\{D_{mn}\}$, n fixed, $m = 0, 1, 2, \dots$ of the series development of the *real* solution

$$(1.2) \quad U(z, z^*) = \sum_{m, n=0}^{\infty} D_{mn} z^m z^{*n}$$

of (1.1) determine the location and character of the singularities of $U(z, z^*)$ up to a finite number of isolated ones.

Here $z = x + iy$, $z^* = x - iy$, $D_{mn} = \bar{D}_{nm}$.

We conclude with some remarks about properties of subsequences of coefficients of the developments of $U(z, z^*)$ around different centers.

We mention that the results obtained are independent of the coefficients A, B, C of (1.1).

2. The method of the integral operator. Some methods for the study of harmonic functions of two variables are based on their connection with analytic

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