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Envelopes of holomorphy for solutions of the Laplace and Dirac equations

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Abstract: Analytic continuation and domains of holomorphy for solution to the complex Laplace and Dirac equations in $\mathbf{C}^n$ are studied. First, geometric description of envelopes of holomorphy over domains in $\mathbf{E}^n$ is given. In more general case, solutions can be continued by integral formulas using values on a real $n-1$ dimensional cycle in $\mathbf{C}^n$. Sufficient conditions for this being possible are formulated.

Keywords: envelope of holomorphy, integral formula, index, null-convexity, complex null cone, Lipschitz boundary
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