The behaviors of singular solutions of some partial differential equations in the complex domain

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Let $L(u) = 0$ be a partial differential equation in a neighborhood of $z = 0$ in $\mathbf{C}^{d+1}$, $z = (z_0, z_1, \cdots, z_d)$. Suppose that $u(z)$ solves $L(u) = 0$, which is not necessarily holomorphic on $K = \{z_0 = 0\}$. The aim of the lecture is to study the behaviors of a singular solution $u(z)$ near K. We give asymptotic terms of $u(z)$ as z_0 tends to 0 for some linear or nonlinear partial differential equations.