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Koushik Ramachandran* (koushik.math@gmail.com). *On the number of critical points of the localization landscape.*

Let $\Omega \subset \mathbb{C}$ be a bounded domain. The localization landscape of Ω is a function v which satisfies $\Delta v = -2$ in Ω with boundary data $v(z) = 0$, for $z \in \partial\Omega$. In this talk, we will present an upper bound for the number of critical points of v in various domains where we can make sense of some notion of "order" of the domain. We will talk about connections to eigenvalue problems and conclude the talk with some open problems. Based on joint work with Erik Lundberg. (Received August 17, 2020)