## ABSTRACT

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### How hard is nonconvex nonsmooth optimization?

Blackbox minimization of general lipschitz functions seems a formidable task. However, a 2020 breakthrough by Zhang et al. analyzed the complexity of an intuitively-appealing algorithm. Recent examples of Jordan et al. show that randomization is essential in general. Nonetheless, a simple deterministic version does succeed on difference-of-convex objectives, with complexity related to an intriguing measure of their nonconvexity.