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Patrick Clarke* (pclarke@math.upenn.edu). *Categorical T-duality.*

When studying homological mirror symmetry for toric Landau-Ginzburg models it is tempting to apply T-duality to the moment map fibers. However, this approach runs into considerable difficulties as the interesting data lies on the degenerate fibers, and it is not geometrically obvious how to proceed.

We present a way to circumvent this problem using a categorical formulation of T-duality in terms of cones in the Fukaya category and Kontsevich's approach to the deformation theory of categories. (Received January 25, 2010)