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Kyle Fey* (s-kfey2@math.unl.edu), University of Nebraska - Lincoln, Department of Mathematics, 203 Avery Hall 880130, Lincoln, NE 68588-0130, and Mikil Foss. Morrey Regularity for Asymptotically Convex Variational Problems with (p,q) Growth.

I will present global Morrey regularity results for minimizers of functionals with the general form

$$u \mapsto \int_{\Omega} f(x, \nabla u(x)) \,\mathrm{d}x.$$

The function $F \mapsto f(x, F)$ is assumed to behave like a rotationally symmetric convex function with (p, q) growth whenever |F| is sufficiently large. The regularity results are valid up to the boundary provided that the boundary data is sufficiently smooth. (Received September 22, 2009)