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## Partial Hölder Continuity of Minimizers of Functionals Satisfying a General Asymptotic Relatedness Condition

We consider the partial Hölder continuity of minimizers of functionals of the form

$$v \mapsto \int_{\Omega} f(x, v, Dv) \, dx,$$

where  $\Omega \subseteq \mathbb{R}^n$  is open and bounded. In our setting the integrand  $f : \Omega \times \mathbb{R}^N \times \mathbb{R}^{N \times n} \to \mathbb{R}$  is not necessarily continuous in any of its three arguments. In particular, due to the use of a suitable asymptotic relatedness condition, f possesses continuity and convexity only as the norm of its third argument tends to infinity. Since, in particular, v is possibly vector-valued, this provides a generalization of certain existing regularity results in the literature and helps to further build a low-order regularity theory.

Keywords: Partial regularity, Morrey regularity, Hoelder continuity.

MSC: 49N60; 46E35