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Regularity results for minimizers of some variational integrals

In an open set $\Omega \subset \mathbb{R}^m \ \ (m \geq 2)$ let us define the maps $u : \Omega \to \mathbb{R}^n$. Also, let us consider the $p(x)$-*energy functional* as follows

$$\mathcal{E}(u;\Omega) := \int_\Omega \left(g^{\alpha\beta}(x) G_{ij}(u) D_\alpha u^i(x) D_\beta u^j(x) \right)^{p(x)/2} dx,$$

being $(g^{\alpha\beta}(x))$ and $(G_{ij}(u))$ symmetric positive definite matrices whose entries are continuous functions defined on Ω and $\mathbb{R}^n$ respectively, and $p(x)$ a continuous function on Ω with $p(x) \geq 2$.
Main focus is the study of regularity properties, interior and up to the boundary, of the minimizers u of $\mathcal{E}$ and developments in this direction. Some open problems concerning qualitative properties are discussed.