Weak minima of integral functionals in Carnot-Carathéodory spaces F. GIANNETTI

Abstract

We prove a regularity result for weak minima of integral functionals of the form $\mathfrak{F}(u) = \int_{\Omega} F(Xu) dx$ where the integrand F is a continuous function which grows as $|\xi|^p$ for some p > 1 and $X = (X_1, \ldots, X_k)$ is a family of vector fields with real, C^{∞} smooth and globally Lipschitz coefficients satisfying the Hörmander condition.