Jan Malý
L^p-approximation of Jacobians

Abstract: The paper investigates the nonlinear function spaces introduced by Giaquinta, Modica and Souček. It is shown that a function from $Cart^p(\Omega, \mathbf{R}^m)$ is approximated by $\mathcal{C}^1$ functions strongly in $\mathcal{A}^q(\Omega, \mathbf{R}^m)$ whenever $q < p$. An example is shown of a function which is in $cart^p(\Omega, \mathbf{R}^2)$ but not in $cart^p(\Omega, \mathbf{R}^2)$.