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Regularity for p -Harmonic Systems with Gradient Below the Critical Growth

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Regularity for p -Harmonic Systems with Gradient Below the Critical Growth

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Abstract In this paper, we shall establish that each weak solution of p -harmonic type systems with the gradients below the controllable growth belongs to, H^{α} -older continuity spaces with any H^{α} -older exponent $\alpha \in [0, 1)$. Furthermore, we can obtain that the gradients of the corresponding weak solutions also belong to locally H^{α} -older continuity spaces with some H^{α} -older exponent.

Key words [controllable growth](#) [p-harmonic systems](#) [full regularity](#)

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