

Titolo: Radial symmetry for the critical p -Laplace equation in \mathbb{R}^N .

ABSTRACT. We consider weak non-negative solutions to the critical p -Laplace equation in \mathbb{R}^N

$$-\Delta_p u = u^{p^*-1},$$

in the singular case $1 < p < 2$. We prove that if $p^* \geq 2$ then all the solutions in $\mathcal{D}^{1,p}(\mathbb{R}^N)$ are radial (and radially decreasing) about some point. As a consequence a classification result follows.

REFERENCES

- [1] Damascelli, L., Merchán S., M. L., Sciunzi, B. *Radial symmetry and applications for a problem involving the $-\Delta_p(\cdot)$ operator and critical nonlinearity in \mathbb{R}^N* , Adv. Math., 265 (2014), 313-335.