Local Landesman-Lazer Condition in Quasilinear Problems

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Abstract

In this talk I present a **joint work with Manuela C. M. Rezende and Elves A. B. Silva** [1] on the existence and multiplicity of solutions for quasilinear problems in bounded domains involving the p-Laplacian operator under local versions of the Landesman-Lazer condition. The main results do not require any growth restriction at infinity on the nonlinear term which may change sign. Variational methods, truncation arguments and approximation techniques based on a compactness result for the inverse of the p-Laplacian operator are the main tools.

References

[1] D. Arcoya, M. C. M. Rezende and E. A. B. Silva, Quasilinear problems under local Landesman-Lazer condition, *Calc. Var.*, (2019), 58:210 https://doi.org/10.1007/s00526-019-1650-9.