

Multiple positive solutions of Brezis-Nirenberg type problems involving sign-changing weight functions

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Abstract:

We are concerned with the multiplicity of positive solutions of a semilinear elliptic equation with an H^1 boundary data supported in a smooth bounded domain of \mathbb{R}^N . The existence of k positive solutions is established for eigenvalue in a certain range, provided that the coefficients of the equation satisfy certain maximum condition.