New phenomena in the study of (p,q)-equations

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I shall discuss some new recent striking results that appear in the analysis of problems with unbalanced growth. In the isotropic case, I shall point out an interesting discontinuity property of the spectrum. In the second part my talk, I will consider the anisotropic setting and I shall discuss a new case corresponding to equations with mixed subcritical-critical-supercritical regime. Several perspectives and interesting new research directions will be highlighted in the final part of this talk.

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