

Two notions which affected nonlinear analysis

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General mathematical theories usually originate from investigation of particular problems and notions which could not be handled by available tools and methods. The Fučík spectrum and the p -Laplacian are the typical examples in the field of Nonlinear Analysis. The systematic study of these notions during the last four decades led to several interesting and surprising results and revealed deep relationship between the linear and nonlinear structures. The modest contribution in this field of the speaker and of his coauthors will be presented in this lecture.