

LANGUAGES

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DOUBLE PHASE PROBLEMS WITH VARIABLE GROWTH

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Ora Inizio: 15:00

Ora Fine: 16:00

Aula: Sala Riunioni (Dip. Matematica)

Analisi

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We consider several classes of double phase variational integrals driven by nonhomogeneous potentials. We study the associated Euler equations and we highlight some new properties. We point out concentration phenomena of the spectrum, nonexistence results, combined effects of reaction and absorption terms, double phase energies driven by anisotropic Baouendi-Grushin operators.

The analysis developed in this talk extends the abstract framework corresponding to some standard cases associated to the $p(x)$ -Laplace operator, the generalized mean curvature operator, or the capillarity differential operator with variable exponent. These results complement the pioneering contributions of P. Marcellini and G. Mingione in the field of variational integrals with unbalanced growth. We also address some perspectives and open problems.