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Some nonlinear BVPs for quasilinear second order ordinary differential system

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Abstract

Using Leray-Schauder degree, the existence of solutions for quasilinear systems of the form $(q(t)\Phi(x'))' = f(t,x,x')$, with nonlinear boundary conditions of mixed type $F(x(0), G(x), H(x')) = 0,\ x'(\infty) = 0$, is proved for various classes of Φ when F and f satisfy suitable sign conditions.

References

[1] J. Mawhin and K. Szymańska-Dębowska, Some nonlinear boundary value problems of mixed type on a half line for quasilinear second order ordinary differential systems, submitted.

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