Submission for an invited session, organized by Ana Cristina Casimiro & Paula Pascoal-Faria

Note on periodic resonant problems with nonlinear dissipation

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Motivated by a paper of Alan C. Lazer we consider the periodic problem for a 2nd order ODE with linear part at resonance, a bounded restoring force g(u) and a nonlinear dissipative term (F(u))'. In this presentation we present a conditions for the existence of solution to this problem. The conditions for the existence of solutions belong to the well known Landesman-Lazer type conditions and involve the interaction of a forcing term with the gap between limits of F (or g) at infinity.