## Boundary value problems for differential equations and systems involving singular or bounded $\phi\text{-Laplacians}$

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Abstract. In this lecture, we survey a number of recent results obtained in the study of second order differential equations or systems of the form

$$(\phi(u'))' = f(t, u, u')$$

submitted to various boundary conditions, when  $\phi : \mathbb{R} \to (-a, a)$  (bounded case) or  $\phi : (-a, a) \to \mathbb{R}$  (singular case) is a homeomorphism such that  $\phi(0) = 0$ . We also consider the radial solutions on a ball or an annulus of the Dirichlet problem for equations of the form

$$\operatorname{div}\left(\frac{\nabla u}{\sqrt{1\pm \|\nabla u\|^2}}\right) = f(\|x\|, u, \nabla u).$$