Record Nr. UNINA9910300243503321 Contributions to nonlinear elliptic equations and systems: a tribute to **Titolo** Diairo Guedes de Figueiredo on the occasion of his 80th birthday // edited by Alexandre N. Carvalho, Bernhard Ruf, Ederson Moreira dos Santos, Sergio H. M. Soares, Thierry Cazenave Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Birkhäuser,, 2015 **ISBN** 3-319-19902-1 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (434 p.) Progress in Nonlinear Differential Equations and Their Applications, , Collana 1421-1750 ; ; 86 515.35 Disciplina Soggetti Partial differential equations Functional analysis Differential equations Mathematical physics Partial Differential Equations **Functional Analysis Ordinary Differential Equations** Mathematical Applications in the Physical Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Nota di contenuto Nonexistence of positive classical solutions for the nonlinear Schr odinger equation with unbounded or decaying weights --Hylomorphic solitons for the generalized KdV equation -- A consequence of Diairo's Lectures on the Ekeland variational principle --

Schr odinger equation with unbounded or decaying weights -Hylomorphic solitons for the generalized KdV equation -- A
consequence of Djairo's Lectures on the Ekeland variational principle -Waveguide solutions for a nonlinear Schr odinger equation with mixed
dispersion -- Fibers and global geometry of functions -- Existence of
infinitely many continua of radial singular polytropes with gain-loss
function -- Branches of positive solutions for subcritical elliptic
equations -- Multiple solutions to anisotropic critical and supercritical
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states for fractional H enon systems -- Positive solutions for certain

classes of fourth-order ordinary elliptic Systems -- Remarks on the behavior of the best Sobolev constants -- Bubbling solutions to an anisotropic H'enon equation -- The sub-supersolution method for Kirchhoff systems: applications -- Nodal structure of the solution of a cooperative elliptic system -- Nonquadraticity condition on superlinear problems -- Radial solutions of a Neumann problem coming from a burglary model -- Modeling suspension bridges through the von K'arm'an quasilinear plate equations -- Nonlinear Klein-Gordon-Maxwell systems with Neumann boundary conditions on a Riemannian manifold with boundary -- Asymptotic analysis for radial signchanging solutions of the Brezis-Nirenberg problem in low dimensions -- Critical and noncritical regions on the critical hyperbola -- A nonlinear Steklov problem arising in corrosion modeling -- Remarks on the p-laplacian on thin domains -- Spatial trajectories and convergence to traveling fronts for bistable reaction-diffusion equations --Regularity estimates for fully non linear elliptic equations which are asymptotically convex.

Sommario/riassunto

This volume of contributions pays tribute to the life and work of Djairo Guedes de Figueiredo on the occasion of his 80th birthday. The articles it contains were born out of the ICMC Summer Meeting on Differential Equations – 2014 Chapter, also dedicated to de Figueiredo and held at the Universidade de São Paulo at São Carlos, Brazil from February 3-7, 2014. The contributing authors represent a group of international experts in the field and discuss recent trends and new directions in nonlinear elliptic partial differential equations and systems. Diairo Guedes de Figueiredo has had a very active scientific career, publishing 29 monographs and over one hundred research articles. His influence on Brazilian mathematics has made him one of the pillars of the subject in that country. He had a major impact on the development of analysis. especially in its application to nonlinear elliptic partial differential equations and systems throughout the entire world. The articles collected here pay tribute to him and his legacy, and are intended for graduate students and researchers in mathematics and related areas who are interested in nonlinear elliptic partial differential equations and systems.