

Contents

A Short Summary of my Scientific Life	xix
D. G. de Figueiredo	
J-Monotone Nonlinear Operators in Banach Spaces	1
F. E. Browder and D. G. De Figueiredo	
On the Radial Projection in Normed Spaces	11
D. G. De Figueiredo and L. A. Karlovitz	
Maximal Monotone Operators and Nonlinear Integral Equations of Hammerstein Type	17
Felix E. Browder, Djairo G. de Figueiredo and Chaitan P. Gupta	
The Extension of Contractions and the Intersection of Balls in Banach Spaces	23
D. G. de Figueiredo and L. A. Karlovitz	
On the Variational Method for the Existence of Solutions of Nonlinear Equations of Hammerstein Type	35
Djairo G. de Figueiredo and Chaitan P. Gupta	
The Dirichlet Problem for Nonlinear Elliptic Equations: A Hilbert Space Approach	43
Djairo Guedes de Figueiredo	
Nonlinear Perturbations of a Linear Elliptic Problem Near Its First Eigenvalue	65
Djairo G. de Figueiredo and Jean-Pierre Gossez	

Perturbations of Second Order Linear Elliptic Problems by Nonlinearities Without Landesman–Lazer Condition	85
Djairo Guedes de Figueiredo and Wei-Ming Ni	
Double Resonance in Semilinear Elliptic Problems	91
Henri Berestycki and Djairo Guedes de Figueiredo	
Semilinear Elliptic Equations at Resonance: Higher Eigenvalues and Unbounded Nonlinearities	121
Djairo G. de Figueiredo	
A Priori Estimates and Existence of Positive Solutions of Semilinear Elliptic Equations	133
D. G. De Figueiredo, P. -L. Lions and R. D. Nussbaum	
On The Superlinear Ambrosetti–Prodi Problem	157
Djairo G. de Figueiredo	
A Variational Approach to Superlinear Elliptic Problems.	169
Djairo G. de Figueiredo and Sergio Solimini	
Radial Solutions for a Dirichlet Problem in a Ball	189
D. G. Costa and D. G. De Figueiredo	
On Pairs of Positive Solutions for a Class of Semilinear Elliptic Problems	199
Djairo G. De Figueiredo and Pierre-Louis Lions	
Positive Solutions for Some Classes of Semilinear Elliptic Problems	215
Djairo G. de Figueiredo	
A Maximum Principle for an Elliptic System and Applications to Semilinear Problems	225
Djairo G. de Figueiredo and Enzo Mitidieri	
On the Uniqueness of Solution for a Class of Semilinear Elliptic Problems	239
D. G. Costa, D. G. De Figueiredo and J. V. A. Goncalves	
On Superlinear Elliptic Problems with Nonlinearities Interacting Only with Higher Eigenvalues	251
Djairo G. De Figueiredo	

Nonresonance Below the First Eigenvalue for a Semilinear Elliptic Problem	269
Djairo G. De Figueiredo and Jean-Pierre Gossez	
Maximum Principles for Linear Elliptic Systems	291
Djairo G. De Figueiredo and Enzo Mitidieri	
On a Superlinear Sturm-Liouville Equation and a Related Bouncing Problem	323
D. G. Figueiredo and B. Ruf	
The Exact Number of Solutions for a Class of Ordinary Differential Equations Through Morse Index Computation	345
D. G. Costa, D. G. De Figueiredo and P. N. Srikanth	
Strict Monotonicity of Eigenvalues and Unique Continuation	361
Djairo G. de Figueiredo and Jean-Pierre Gossez	
Positive Solutions of Semilinear Elliptic Systems	369
Ph. Clément, D. G. de Figueiredo and E. Mitidieri	
On Superquadratic Elliptic Systems	387
Djairo G. de Figueiredo and Patricio L. Felmer	
A Liouville-Type Theorem for Elliptic Systems	405
D. G. de Figueiredo and P. L. Felmer	
Monotonicity and Symmetry of Solutions of Elliptic Systems in General Domains	417
Djairo G. De Figueiredo	
Elliptic Equations in $\mathbb{R}^2$ with Nonlinearities in the Critical Growth Range	423
D. G. de Figueiredo, O. H. Miyagaki and B. Ruf	
Decay, Symmetry and Existence of Solutions of Semilinear Elliptic Systems	439
Djairo G. de Figueiredo and Yang Jianfu	
Infinitely Many Solutions of Nonlinear Elliptic Systems	463
Thomas Bartsch and Djairo G. de Figueiredo	
A Priori Bounds for Positive Solutions of a Non-variational Elliptic System	483
Djairo Guedes de Figueiredo and Jianfu Yang	

Some Remarks on a System of Quasilinear Elliptic Equations	501
Lucio Boccardo and Djairo Guedes De Figueiredo	
Solutions of a Nonlinear Schrödinger Equation	517
D. G. de Figueiredo and Y. H. Ding	
Strongly Indefinite Functionals and Multiple Solutions of Elliptic Systems	539
D. G. De Figueiredo and Y. H. Ding	
Local Superlinearity and Sublinearity for Indefinite Semilinear Elliptic Problems	557
Djairo G. De Figueiredo, Jean-Pierre Gossez and Pedro Ubilla	
An Orlicz-Space Approach to Superlinear Elliptic Systems	573
Djairo G. de Figueiredo, João Marcos do 'O and Bernhard Ruf	
Liouville Type Theorems, Monotonicity Results and a Priori Bounds for Positive Solutions of Elliptic Systems	599
Djairo G. de Figueiredo and Boyan Sirakov	
On the Ambrosetti–Prodi Problem for Non-variational Elliptic Systems	629
Djairo G. de Figueiredo and Boyan Sirakov	
Solitary Waves for Some Nonlinear Schrödinger Systems	647
Djairo G. de Figueiredo and Orlando Lopes	
Non-variational Elliptic Systems in Dimension Two: A Priori Bounds and Existence of Positive Solutions	661
Djairo G. de Figueiredo, João Marcos do Ó and Bernhard Ruf	
The Critical Hyperbola for a Hamiltonian Elliptic System with Weights	681
Djairo G. de Figueiredo, Ireneo Peral and Julio D. Rossi	
Local ‘Superlinearity’ and ‘Sublinearity’ for the p-Laplacian	697
Djairo G. de Figueiredo, Jean-Pierre Gossez and Pedro Ubilla	
List of Publications of Djairo G. de Figueiredo	729
List of Ph.D. Students of Djairo G. de Figueiredo	737