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Liberal Arts and Sciences
Mathematics Department
Patricio Aviles Papers, 1980-1995

Box 1:

Articles

"Boundary Behavior of Harmonic Maps on Non-Smooth Domains and Complete Negatively Curved Manifolds" (with H. Choi and M. Micallef), c. 1980s

"The $C^{1,a}$ Boundary Regularity of the P-Laplacian System" (with J. Manfredi), c. 1990s

"Conformal Deformations of Complete Manifolds with Negatie Curvature" (with R. McOwen), undated

"Duality Formulas and Variational Integrals" (with Y. Giga and N. Komuro), 1992

"Long Time Existence and Removable Singularities for the Evolution of Harmonic Maps of Surfaces" (with M. Micallef and H. Naito), c. 1990s

"Minimal Currents, Geodesics and Relaxation of Variational Integrals on Mappings of Bounded Variation" (with Y. Giga), c. 1990s

"Numerical Problems Related to the Mathematical Theory of Liquid Crystal Configurations and Harmonic Maps," c. 1980s

"On the Regularity of Harmonic Maps," 1990

"On the Sobolev Quotient of an Einstein Manifold" (with J. Escobar), c. 1990s

"On the Yamabe Problem"

"Partial Regularity and Compactness of Solutions of Semilinear Elliptic Equations. Applications to Conformal Geometry" (with A. Folguera), c. 1990s

"Partial Regularity of Least Gradient Mappings" (with Y. Giga), c. 1990s

"The Reularity and Compactnessfor Harmonic Maps into Manifolds and Liquid Crystals," c. 1990s

Report on the Paper of P. Aviles "Local Behavior of Solutions of some Eliptic Equations," c. 1980s

"The Regulatory Theory for Harmonic Maps into Varieties," c. 1990s

"The Regulatory Theory for Minimizer Harmonic Maps into Admissible Singular Targets," c. 1990s

"Singularities and Rank One Properties of Hessian Measures" (with Y. Giga), 1988

"A Study of Phragmén-Lindelöf Type of Theorems for Certain Classes of Nonlinear Partial Differential Equations" (with J. Serrin), c. 1980s

"A Study of Singularities and Phragmén-Lindelöf Theorems for Certain Classes of Nonlinear Elliptic Second Order Partial Differential Equations," 1981

"Una Teoria de Regularidad en la Frontera Para Aplicaciones Armonicas Definidas Sobre Dominios Lipschitz," undated

"Variational Integrals on Mappings of Bounded Variation" (with Y. Giga), c. 1990s

Biography, 1994
Colombia, 1988-1990
Committies, 1988-1991
Correspondence, 1985-1991

Correspondence, 1988-1995
Departmental Memos, 1991-1994
Grant Proposals
      "Algebraic Differential Equations and Exponential Polynomials," 1991[RESTRICTED]
      "Combinatorial Properties of Polytopes," 1988 [RESTRICTED]
      "Computing Equipment for Research in Mathematics," Professor C.W. Henson (with
      Aviles, Craggs, Newton, Robinson and West), 1988 [RESTRICTED]
      "Differential Geometry and Partial Differential Equaitons Proposal to the Center for
      Advanced Studies"
      "Mathematical Sciences: Existence and Regularity for Solutions of Elliptic Equations and
      Systems," 1994
      "National Science Foundation Comments on Previous Research of P. Aviles," 1989
      "N.S.F. Progress Report"
      "Numerical Calculations in Nonlinear Partial Differential Equations," 1989
      [RESTRICTED]
      "Problems Related to Differential Geometry and Mathematical Physics," c. 1980s
      [RESTRICTED]
      "Proposal for Apple Computer Equipment"
      "Proposal to the Center for Advanced Studies: Differential Geometry and Partial
      Differential Equations," c. 1980s
      "Proposals to the National Science Foundation," 1988 [RESTRICTED]
      "Research In Problems of Differential Geometry and Mathematical Physics," undated
      [RESTRICTED]
      "Research Plans in Japan (with Y. Giga)," c. 1980s
      "Review of 1988 SCREMS Proposal from UIUC Math Department," 1989
      "Scientific Computing Research Equipment for the Mathematical Sciences (SCREMS)
      National Science Foundation Proposal (with Henson, West, Newton, Craggs, and
      Robinson)," c. 1980s
      "Singularities in Nonlinear Partial Differential Equations," 1988
Mathematical Research Institute of Oberwolfach, 1992
Referred Articles
Syllabi, 1990-1993
Thesis–"A Study of Singularities and Phragmén-Lindelöf Theorems for Certain Classes of
Nonlinear Elliptic Second Order Partial Differential Equations," 1981
Transparencies, undated