Curriculum Vitae – Franca Matteo

Education and Professional Experience

- **Assistant Professor** from November 2007 at Marche Polytechnic University in Ancona (Italy).
- **Assistant Lecturer** September 2004 to August 2007; Marche Polytechnic University in Ancona (Italy).
- **Ph.D. in Mathematics** 30 September 2003; Firenze University (Italy).
- **Degree in Mathematics** 10 December 1999; Bologna University (Italy).

Research Visit.

- **Universidad Tecnica Federigo Santa Maria in Valparaiso (Cile)** from 3/7 to 17/7 2012 invited by prof. I. Flores.
- **Universita' di Firenze (Italy)** from 10/1 to 12/1 2007, invited by prof. R. Johnson
- **Comenius University in Bratislava (Slovakia)** from 28/11 to 10/12 2005, invited by prof. M. Feckan.
- **Hamburg University (Germany)** from 20/2 to 25/3 2005, invited by prof. I. Gasser.
- **National Taiwan University in Taipei (Taiwan)** from 22/9 to 8/10 2004, invited by prof. K. Palmer.
- **Masarik University in Brno (Czech Rep.)** from 11/1 to 16/3 2004, invited by prof. Z. Dosla.

Publications

- M. Franca, *Bifurcation diagrams for singularly perturbed system: the multidimensional case*, preprint.
- A. Calamai, M. Franca *Mel'nikov methods and homoclinic orbits in discontinuous systems*, preprint.
- M. Franca, *Positive solutions of semilinear elliptic equations: a dynamical approach*, J. Diff. Int. Eq.
- M. Franca, *Bifurcation diagrams for singularly perturbed system*, Electr. J. Qual. Th. Diff. Eq., No. 78 (2012), 1–23.
- M. Franca, *Positive solutions for semilinear elliptic equations with mixed non-linearities: 2 simple models exhibiting several bifurcations*, J. Dynamics Differential Equations, **23**, issue 3, (2011), 573-611
- M. Franca, *Fowler transformation and radial solutions for quasilinear elliptic equations. Part 2: nonlinearities of mixed type,* Annali Matematica Pura e Applicata, **189**, issue 1 (2010), 67–93
- M. Franca, *Radial ground states and singular ground states for a spatial dependent p-Laplace equation*, in Journal Diff. Eq., **248**, (2010), 2629–2656

- M. Franca, *Structure theorems for positive radial solutions of the generalized scalar curvature equation*, Funkcialaj Ekvacioj, **52**, issue 1 (2009), 343–369
- M. Franca, *Fowler transformation and radial solutions for quasilinear elliptic equations. Part 1: the subcritical and the supercritical case.* Canadian Math. Appl. Quart. **16**, (2008), 123-159.
- F. Battelli, M. Fečkan, M. Franca, *Periodic Solutions of a Periodically Forced and Undamped Beam Resting on Weakly Elastic Bearings*; Z.A.M.P. **59** (2008), 212–243.
- F. Battelli, M. Fečkan, M. Franca, *On the chaotic behavior of a compressed beam*, Dynamics of PDE, **4**, No 1 (2007) , 55–86.
- M. Franca, *Non-Autonomous Quasilinear Elliptic Equations and Wazewski's principle*;
  Topological Methods in Nonlinear Analysis, **23**, (2005), 331–349.
- M. Franca, *Ground states and singular ground states for quasilinear elliptic equations in the subcritical case* Funkcialaj Ekvacioj, **48**, No 4 (2005) , 415–434.
- M. Franca, *Some results on the m-Laplace equations with two growth terms*; J. Dynamics Differential Equations, **17** (2005), 391–425.
- M. Franca and R. Johnson,*Ground States and Singular Ground States for quasilinear partial differential equation with critical exponent* , Advanced Nonlinear Studies, **4**, (2004) 93–120.
- M. Franca *Classification of positive solutions of p-Laplace equation with a growth term*, Archivum Mathematicum (Brno), **40**, No 4 (2004) , 415–434.
- M. Franca and R. Johnson, *Asymptotic expansion of solutions of an elliptic equation related to the non-linear Schrödinger equation*, Journal of Dynamics and Differential Equations, **15**, (2003), 535–551.
- M. Franca, *A dynamical approach to the study of radial solutions for p-Laplace equation* Rendiconti del seminario matematico di Torino **65**, No 1 (2007) , 53-88. (articolo di tipo survey)