

Sami BARAKET

Short CV

Full Professor in Mathematics
Faculty of Sciences of Tunis, Department of Mathematics, University of Tunis El Manar, Tunisia
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Diplomas

- Bachelor of Secondary Education, 1985, Tunisia.
- Degree in Mathematical Sciences, 1990, Faculty of Sciences of Tunis, Tunisia.
- Ph.D in Mathematics, 1994, Center of mathematics and their application, ENS Cachan, Paris, France.
- Habilitation in Mathematics, 1998, Faculty of Sciences of Tunis, Tunisia.

Educational Activities

- 1991-1994. Contractual Assistant for Education and Research at the University of Cergy Pontoise, France.
- 1994-1996. Assistant Professor at Faculty of Science of Tunis.
- 1996-1998. Assistant Professor at Faculty of Science of Tunis.
- 1998-2003. Associate Professor at Faculty of Science of Tunis.
- 2003-2008. Full Professor at Faculty of Science of Tunis.
- 2008- 2013. Full Professor at King Saud University, Arabia Saudia.
- 2013- . Full Professor at Faculty of Science of Tunis.

Research Activities

- Founder and Director of Research Unit *Nonlinear Analysis and Geometry*, since 2003 in Tunisia.
- Fellow of *Nonlinear Analysis and PDE's Committee* at King Saud University.

Supervising Thesis

- L. Ben Chaâbane: *Some results on PDE related to geometry and physics*, 2006.
- I. Bazarbacha: *Study of some PDE related to geometry and physics*, 2006.
- I. Abid: *Study of some PDE related to geometry and physics*, 2008.
- T. Ouni: *On some nonlinear problems related to geometry and physics*, 2008.
- N. Trabelsi : *Nonlinear problems related to geometry and physics*, 2009.
- I. Ben Omrane : *Nonlinear problems related to geometry and physics*, 2010.

Publications

1. S. Baraket: Quelques résultats sur des équations aux dérivées partielles provenant de problèmes géométriques. **Nouvelle Thèse, École Normale Supérieure de Cachan**, (1994).
2. S. Baraket and D. Ye: Minimizing harmonic mappings from a surface perforated with small holes into a Riemannian manifold. **Manuscripta Mathematica**, Vol. 77, 191-199, (1992).
3. S. Baraket and L. Lassoued: Bifurcation analysis of solutions of Landau Lipschitz problem with external fields. **Houston Journal of Mathematics**, Vol.23, N°4, 669-683, (1997).
4. S. Baraket: Points critiques du système de Ginzburg-Landau sur une surface Riemannienne. **Comptes Rendus de l'Académie des Sciences de Paris**, t. 319 Série I, p. 949-952, (1994).
5. S. Baraket: Critical points of the Ginzburg-Landau system on a Riemannian surface. **Asymptotic Analysis**, Vol. 13, 277-317, (1996).
6. S. Baraket: Estimation of the best constant involving the L1 norm in the Wente's inequality. **Annal. Fac. Scien. de Toulouse**, Vol. V, N 3, 373- 386, (1996).

7. S. Baraket and F. Pacard: Construction of singular limits for a semilinear elliptic equation in dimension 2. **Calc. Var. Partial Differential Equations**, **6**, 1-38, (1998).
8. S. Baraket: Construction de limites singulières pour des problèmes elliptiques non linéaires en dimension deux. **Comptes Rendues de l'Académie des Sciences de Paris**, t. 323 Série I, p. 609-614, (1996).
9. S. Baraket: Construction of singular limits for a strongly perturbed two dimensional problem with exponential nonlinearity. **Bulletin des Sciences Mathématiques**, Vol. 123, 255-284, (1999).
10. S. Baraket and D. Ye: Singular limit solutions for two-dimensional elliptic problems with exponentially dominated nonlinearity. **Chinese Ann. Math. Ser. B**, **22**, 287-296, (2001).
11. S. Baraket: The Wentz problem in higher dimensions. **Comm. Partial Differential Equations**, **26**, 1497-1508, (2001).
12. S. Baraket and S. Rebhi: Construction of dipole type singular solutions for a biharmonic equation with critical Sobolev exponent. **Adv. Nonlinear Stud.** **2**, 459-476, (2002).
13. S. Baraket and L. B. Chaabane: The Wentz inequality on weighted Sobolev spaces. **Houston journal of Mathematics**, Vol. 29, No. 4, 1065-1075, (2003).
14. S. Baraket and I. Bazarbacha: The Wentz problem for a singular elliptic equation. **J. Math. Anal. Appl.**, Vol. 284, 711-723, (2003).
15. S. Baraket and M. Dammak: Estimation of the best constant involving the L2 norm of the higher order Wentz problem. **Abstr. Appl. Anal.** 599-606, (2005).
16. S. Baraket, M. Dammak, M. Jleli and D. Ye: Integrability of detru and evolutionary Wentz's problem associated to heat operator. **Chinese Ann. of Math. Ser. B**, **28** (5) 527-532, (2007).
17. S. Baraket, I. Abid, I. Bazarbacha and T. Ouni: Best constant involving the L1 norm of evolutionary Wentz's problem associated to wave operator. **J. Math. Anal. Appl.** **325**, 866-878, (2007).
18. S. Baraket, M. Dammak, T. Ouni and F. Pacard: Singular limits for a 4-dimensional semilinear elliptic problem with exponential nonlinearity. **Ann. I. H. Poincaré - AN** **24** 875-895, (2007).
19. S. Baraket, I. Bazarbacha and N. Trabelsi: Construction of singular limits for four-dimensional elliptic problems with exponentially dominated nonlinearity. **Bull. Sci. Math** **131** 670-685, (2007).
20. I. Abid and S. Baraket: Construction of singular solutions for elliptic problem of fourth order derivative with subcritical. **Differential and Integral Equations**, vol. 21, N 7-8, 653-664, (2008).
21. S. Baraket and T. Ouni: Integrability of detru and evolutionary Wentz problem associated to reaction-diffusion operator. **Arab J. Math. Sc. Volume 15, Number 2, December**, 1-11, (2009).
22. S. Baraket, I. B. Omrane and T. Ouni: Singular limits for 2-dimensional elliptic problem involving exponential nonlinearity with nonlinear gradient term. **Non. Lin. Diff. Eq. App.**, vol. 18, N 1 59-78, (2011).
23. S. Baraket, I. B. Omrane, T. Ouni and N. Trabelsi: Singular limits solutions for 2-dimensional elliptic problem with exponentially dominated nonlinearity and singular data. **Communications in Contemporary Mathematics** Vol. 13, No. 4, 697-725, 24, (2011).
24. S. Baraket, I. Abid, T. Ouni and N. Trabelsi: Singular limits for 2-dimensional elliptic problem with exponentially dominated nonlinearity with nonlinear gradient term. **Bound. Value Probl**, DOI: 10.1186/1687-2770-10, (2011).
25. S. Baraket, I. Abid and T. Ouni: Singular limits solution for 2-dimensional elliptic problems involving exponential nonlinearities with nonlinear gradient terms and singular weights. **Annali di Matematica Pura ed Applicanda** **191**:845-869, (2012).
26. S. Baraket, I. Bazarbacha, S. Kharrati and T. Ouni: Singular limits for 2-dimensional elliptic problem with exponentially dominated nonlinearity with a very general quadratic gradient term. **Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica**, Vol. 21 (1), 19-50, (2013).
27. S. Baraket and T. Ouni: Singular limits for 2-dimensional elliptic problems involving exponential nonlinearity with sub-quadratic convection term. **Glasgow Mathematical Journal**, Vol. 55 (3), 537-557, (2013).
28. S. Baraket and T. Ouni: Singular limits solution for 2-dimensional elliptic problems involving exponential nonlinearity with sub-quadratic convection nonlinear gradient terms and singular weights. **Adv. Nonlinear Anal.** **3** (S1), 69-88, (2014).
29. S. Baraket, M. Dammak and S. Kharrati: Singular limits solution for 2-dimensional elliptic problems involving exponential dominated nonlinearity with sub-quadratic convection term. **To appear in Analele Stiintifice ale Universitatii ALI Cuza din Iasi-Serie Noua-Matematica**, (2014).
30. S. Baraket, M. Khtaiifi and T. Ouni: Singular limit solutions for 4-dimensional stationary Kuramoto-Sivashinsky equations with exponential nonlinearity, **Elect. Jour. Diff. Eq.**, No. 187, pp. 1-26, (2015).

31. *S. Baraket, I. Bazarbacha and M. Trabelsi*: Singular limiting solutions for 4-dimensional elliptic problem involving exponentially dominated nonlinearity with nonlinear terms. **Elect. Jour. Diff. Eq., No. 289, pp. 1-19**, (2015).
32. *S. Baraket, M. Khtaifi and T. Ouni*: Singular limit solutions for 4-dimensional general stationary q-Kuramoto-Sivashinsky equations with exponential nonlinearity, **accepted in Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica**, (2016).
33. *S. Baraket and I. Bazarbacha*: Singular limiting solutions for 2-dimensional semilinear elliptic system of Liouville type with Dirichlet boundary conditions, **accepted in Complex variables and elliptic equations**, (2016).
34. *S. Baraket, A. Messaoudi, S. Saanouni and N. Trabelsi*: Singular limit solutions for a 4-dimensional semilinear elliptic system of Liouville type, **submitted**.