

Vita of Sami Baraket

Full name : Sami Baraket

Marital status : Married, two childrens.

Date and place of Birth : 31 October 1966 in Tunis.

Nationality : Tunisian.

Adress : 69 bis, Avenue Habib Bougatfa 2000. Le Bardo, Tunis.

Phone number : 0021698468885, 00966598252634.

Rank : Professor.

Discipline : Mathematics.

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Diplomas :

- Bachelor of Secondary Education : June 1985 in Tunisia. .
- Degree in Mathematical Science : June 1990, Faculty of Sciences of Tunis. Tunisia
- Ph.D in Mathematics : 1994, Center of mathematics and their application, Ecole Normale Suprieure of Cachan, Paris, France.
- Habilitation in Mathematics : December 1998 , Faculty of Sciences of Tunis. Tunisia.

Educational Activities :

- 1991-1994. Teaching contractual assistant for Education and Research at the University of Cergy Pontoise, France. Tutorial for Analysis and Algebra courses.
- 1994-1996. Teaching assistant at Faculty of Science of Tunis, Tunisia. Tutorial for Analysis course.

- 1996-1998. Teaching assistant Professor at Faculty of Science of Tunis, Tunisia. Tutorial for Analysis course.
- 1998-2003. Teaching associate Professor at Faculty of Science of Tunis, Tunisia. Tutorial for Analysis and Differential Calculus courses.
- 2003-2008. Teaching full Professor at Faculty of Science of Tunis, Tunisia.
- 2008-2011. Teaching full Professor at King Saud University, Arabia Saudia.

Research Activities :

- Director of a Research Unity in Tunisia, "Nonlinear analysis and Geometry" 03/UR/15-01.
- Membership of "Nonlinear Analysis and PDE's " Committee at King Saud University.

Supervising Thesis :

- Lamia Ben Chaabanne :
-DEA (Diplôme d'Etudes Approfondies) of Mathematics : Estimation des Meilleures constantes associées aux normes L^∞ et L^2 d'une solution du Problème de Wentz, 13 July 2001.
-Thesis title : Quelques résultats sur des équations aux dérivées partielles provenant de la géométrie et de la physique, 23 February 2006.
- Imen Bazarbacha :
-DEA (Diplôme des études Approfondies) of Mathematics : Construction d'une solution singulière du problème de Yamabe du type Dipole, 01 July 2002.
-Thesis title : Etude de quelques équations aux dérivées partielles issue de la géométrie et de la physique, 24 February 2006.
- Imed Abid :
-Thesis title : Etude de quelques équations aux dérivées partielles issue de la géométrie et de la physique, 04 march 2008.
- Taieb Ouni :
-DEA (Diplôme des études Approfondies) of Mathematics : Construction de limites singulières pour des problèmes elliptiques semi-linéaires en dimension

deux, 24 June 2004.

-Thesis title : Sur quelques problèmes non linéaires provenant de la géométrie et de la physique, 05 march 2008.

• Nihed trabelsi :

-DEA (Diplôme des etudes Approfondies) of Mathematics : Propriété de Freedholm de l'opérateur linéarisé de la courbure moyenne des hypersurfaces, 21 June 2004.

-Thesis title : Quelques problèmes non linéaires provenant de la géométrie et de la physique, 15 march 2009.

• Inès Ben Omranne :

-Thesis title : Sur des problèmes non linéaires provenant de la géométrie et de la physique, 18 February 2010.

Publications :

1. **S. Baraket**, : *Quelques rsultats sur des quations aux drives partielles provenant de problmes géométriques*. Nouvelle Thse ; Ecole Normale Supérieure de Cachan, 1994.

2. **S. Baraket and D. Ye**, : *Minimizing harmonic mappings from a surface perfored with small holes into a Riemannian manifold*. Manuscripta Mathematica, Vol.77, 191-199, 1992.

3. **S. Baraket et L. Lassoued**, : *Bifurcation analysis of solutions of Landaulifscitz problem with external fields*. Houston Journal of Mathematics, Vol.23,N4,669-683, 1997.

4. **S. Baraket**, : *Points critiques du systme de Ginzburg-Landau sur une surface Riemannienne*. Comptes Rendus de L'Academie 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*. Asymtotic Analysis, Vol. 13, 277-317, 1996.

6. **S. Baraket**, : *Estimation of the best constant involving the L^∞ 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(1998), 1-38.

8. **S. Baraket**, : *Construction de limites singulieres pour des problèmes elliptiques non linéaires en dimension deux*. Comptes Rendues de l'academie 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 Mathematiques, 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(2001), 287-296.
11. **S. Baraket**, : *The Wentz problem in higher dimensions*. Comm. In Partial Diferential Equations, 26 (2001) 1497-1508.
12. **S. Baraket and S. Rebhi**, : *Construction of dipole type singular solutions for a biharmonic equation with critical Sobolev exponent*. Adv. Nonlinear Stud. 2 (2002), 459-476.
13. **S. Baraket and L. B. Chaabane**, : *The Wentz inequality on weighted Sobolev spaces*. Houston journal of Mathematics, Vol. 29, No. 4 (2003), 1065-1075.
14. **S. Baraket and I. Bazarbacha**, : *The Wentz problem for a singular elliptic equation*. J. Math. Anal. Appl. ; Vol. 284 (2003), 711-723.
15. **S. Baraket and M. Dammak**, : *Estimation of the best constant involving the L^2 norm of the higher order Wentz problem*. Abstr. Appl. Anal. (2005) 599-606.
16. **S. Baraket, M. Dammak, M. Jleli and D. Ye**, : *Integrability of $\det \nabla u$ and evolutionary Wentz's problem associated to heat operator*. Chinese Ann. of Math. Ser.B, 28 (5) (2007) 527-532.
17. **S. Baraket , I. Abid, I. Bazarbacha and T. Ouni**, : *Best constant involving the L^∞ norm of evolutionary Wentz's problem associated to wave operator*. J. Math. Anal. Appl. 325 (2007)866-878.
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 (2007) 875-895.
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 (2007) 670-685.
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 (2008) 653-664.
21. **S. Baraket and T. Ouni**, : *Integrability of $\det u$ and evolutionary Wentz's problem associated to reaction-diffusion operator*. Arab J. Math. Sc. Volume 15, Number 2, December 2009, 1-11.
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 (2011) 59-78.

23. S. Baraket, I. B. Omranne , T. Ouni and N. Trabelsi, : *Singular limits solutions for 2-dimensional elliptic problem with exponentially dominated nonlinearity and singular data.* to appear in Communications in Contemporary Mathematics.

24. I. Abid , S. Baraket, T. Ouni and N. Trabelsi, : *Singular limits for 2-dimensional elliptic problem with exponentially dominated nonlinearity with nonlinear gradient term.* to appear.