Date: May 7, 2018

1. **SURNAME:** GHOUSSOUB   **FIRST NAME :** Nassif

2. **FAMILY STATUS:** Married, 3 children

3. **DEPARTMENT/SCHOOL:** Mathematics, Faculty of Science

4. **PRESENT RANK:** Professor   **SINCE:** 1989

5. **POST-SECONDARY EDUCATION**

    (a) *Degrees:*

University or Institution	Degree	Subject Area	Dates
Université Pierre et Marie Curie, Paris, France	D.E.A.	Mathematics	1974
Université Pierre et Marie Curie	Doctorat 3eme cycle	Mathematics	1975
Université Pierre et Marie Curie	Doctorat d'état	Mathematics	1979

    (b) *Areas of special interest:* Ergodic theory, Probabilistic methods in analysis, Geometric and non-linear functional analysis, Variational methods in partial differential equations, Mathematical Analysis of Micro-Electro-Mechanical Systems, Geometric and Functional Inequalities, Optimal Mass transportation.

6. **EMPLOYMENT RECORD**

    (a) Ohio State University, Visiting Assistant Professor, July 1976 - Aug. 1977.

    (b) University of British Columbia, Postdoctoral Fellow, Sept. 1977-Aug. 1979

    (c) University of British Columbia, Assistant professor, Sept. 1979-June 1985.

    (d) University of British Columbia, Associate professor, July 1985-June 1989.

    (e) University of British Columbia, Full professor, July 1989-Present.

    (f) Pacific Institute for the Mathematical Sciences, Director, 1995-2003

    (g) Banff International Research Station, Director, 2004-Present

    (h) University of British Columbia, Distinguished University Professor, 2003-Present.

7. **AWARDS AND DISTINCTIONS**

    (a) Coxeter-James Prize, Canadian Mathematical Society (1990).

    (b) Killam Senior Research Fellowship, UBC (1992).

    (c) Fellow of the Royal Society of Canada (1994).

    (d) Distinguished University Scholar, UBC (2003)

    (e) Doctorat Honoris Causa, Université Paris-Dauphine (2004)

    (f) Jeffrey-Williams Prize, Canadian Mathematical Society (2006)

    (g) Faculty of Science Achievement Award for outstanding service and leadership, UBC (2007)

    (h) The David Borwein Distinguished Career Award (2010)

    (i) Queen Elizabeth II Diamond Jubilee Medal (November 2012)

    (j) Fellow of the American Mathematical Society (2013)

    (k) Honorary Doctor of Science, University of Victoria (2015)

    (l) Officer of the Order of Canada (2015)

    (m) Fellow of the Fields Institute (2017)

8. **TEACHING and SUPERVISION**

(a) *Undergraduate students supervised and/or co-supervised:*

- Armel Primot-Guillo, ENS, Summer undergraduate research project (2008)
- Tristan Robert, ENS, Rennes, Summer undergraduate research project (2013)
- Alistair Barton, Summer undergraduate research project (2016).

(b) *Masters students supervised*

1. Krishna Padayachee, *Choquet Theory*, Completed 1981
2. David Robinson, *Variational Problems*, Completed 1990
3. Christine Chambers, *Deformation from symmetry*, Completed 2000.
4. Leo Tzou, *Infinite dimensional Bolza problems*, Completed 2003
5. Jason Donaldson, *Selfduality in quantum field theory*, Completed 2007.
6. Felipe Garcia Ramos, *Mass transport and geometric inequalities*, Completed 2010
7. Pierre Millien, *Duality between monotone fields and measure preserving involutions*, Completed 2011
8. Hassan Saadi, *Dilaton as the Higgs Particle*, Completed, 2016 (joint with Gordon Semenoff)
9. Alistair Barton, *Stochastic Mass Transport*, Completed, 2018.

(c) *Doctoral students supervised: Ph.D*

1. David Hare, *Differentiability in Banach spaces*, Completed 1987
2. Guancai Fang, *Critical Point Theory*, Completed 1993
3. Yuan Chaoqui, *Quasi-linear problems with Hardy-Sobolev exponents*, Completed 1998
4. Christine Chambers, *Parameter dependent variational problems*, Transferred 2005.
5. Xiao Song Kang, *Porous media equations and elliptic problems with boundary singularities*, 2003
6. Yujin Guo, *The partial differential equations of MEMS devices* Completed 2007
7. Amir Moradifam, *Inequalities and Regularity of Elliptic Partial Differential Equations*, 2006-2010
8. Craig Cowan, *Regularity in second and fourth order nonlinear elliptic problems*, 2006–2010
9. Ramon Zarate Saiz, *Inverse and homogenization problems for maximal monotone operators*, 2006–10
10. Fazly Mostafa, *m-Liouville theorems and regularity results for elliptic PDEs*, 2008–2012
11. Tongseok Lim, *Optimal Martingale Transport,* 2011–16 (joint with Young-Heon Kim)
12. Shaya Shakerian, *The fractional Hardy-Schrödinger operator*, 2013 - July 2017
13. Shirin Borooshaki, *Selfdual Stochastic Differential Equations*, 2013 - Dec. 2017
14. Hardy Chan, *Hardy-Schrödinger operator on Hyperbolic space*, 2013-18 (joint with Juncheng Wei)
15. Malcolm Bowles, *Multi-Mass Transfers,* 2013-2018 (joint with Young-Heon Kim)

(d) *Postdoctoral fellows supervised*

1. Valerie Tardivel, *Harmonic Analysis*, Université Paris VI (1990)
2. Julien Burdeau, *Borderline variational problems*, ENS (1993)
3. Hossein Tehrani, *Semi-linear elliptic equations*, Courant Institute (1994-1997)
4. Guancai Fang, *Critical Point Theory*, Courant Institute (1995-1997)
5. Meijun Zhu, *Non-linear Liouville theorems*, Rutgers University (1996-1998)
6. Philippe Bolle, *Non-homogenous boundary value problems*, ENS (1997, 1998)
7. Ji-guang Bao, *Monge-Ampère Equations*, Beijing University (2000-01)
8. Martial Agueh, *Mass transport and applications*, Georgia Tech (2002-04)
9. Xiangxing Tao, Beijing, *PDE and harmonic analysis*, 2002-03
10. Mohammed Reza Pakzad, Paris, *Ginsburg-Landau systems*, 2003-05
11. David Hasler, Danemark, *Harmonic Analysis*, 2003-05
12. Abbas Moameni, Tehran, *Elliptic PDEs and evolution equations*, 2004-2007
13. Jerome Demange, *Geometric inequalities on manifolds*, Toulouse, 2005
14. Pierpaolo Esposito, Roma III, *Elliptic equations with singular non-linearities*, 2005-06
15. Daniele Cassani, Milano, *Hamiltonian systems of PDEs*, 2006-2007

16. Joao Marcos Bezerra do O, Brazil, *Elliptic systems*, 2006-2007
17. Stephane Kirsh, *Prescribed mean curvature problems*, 2007-2009.
18. Mohammad El SMAILY, *Traveling fronts*, 2008-10
19. Walid Abou-Salem, co-supervisor with Joel Feldman, 2009-10
20. Jun Kitagawa, 2011-13 (co-supervisor with Young-Heon Kim)
21. Lu Li, 2011-2012
22. Gonzalo Davila, *Free boundary problems*, 2012-14
23. Emil Wiedemann, *Weak solutions of the Euler equation*, 2012-14
24. I. Zwiers, 2012-13 (co-supervisor with Young-Heon Kim)
25. Baptiste Devyver, *Hardy ineqalities on manifolds*, 2014-16
26. Mingfeng Zhao, *Travelling waves*, 2014-16
27. Tingting Huan, *Combustion models with the fractional Laplacian,* Fall 2014.
28. Nguyen Lam, *Functional Inequalities*, 2016-19.
29. Saikat Mazumdar, *The Hardy-Schrodinger operator on manifolds*, 2016-18
30. Shaya Shakerian, *The fractional Hardy-Schrödinger operator*, 2017-18
31. Aaron Palmer, *Stochastic Control and Mass transport*, 2017-19 (joint with Y-H. Kim).

9. **SERVICE TO THE UNIVERSITY**

   (a) *Memberships on committees, including offices held and dates*
   - Colloquium Chairman (1988, 1990)
   - Tenure and Promotion Committee (1988, 1998, 2000)
   - Graduate Committee (1989)
   - Committee on Appointments (1990, 1991, 1993, 1994, 1995, 1997, 2000, 2001, 2002, 2003)
   - Dean's Head Selection Committee (1993)
   - Coordinator of UBC-Université Paris VI exchange program in Analysis (1985/90)
   - 3x3 Canada-China Committee-Math Coordinator (1998-2002)
   - UBC Representative at MSRI, Berkeley.
   - UBC Presidential Review Committee for Canada Research Chairs (2001-03).
   - Dean's Head Selection Committee (2002)
   - Re-appointment Committee for Dean of Graduate Studies (2002)
   - Selection Committee for Director of the Wall Institute (2002-03)
   - Executive Committee for Research, UBC (2004-06)
   - Dean of Science selection Committee (2005-06)
   - Department's Academic plan committee (2006)
   - Department's Graduate committee (2006-07)
   - Department's Strategic planning committee (2008-09)
   - Department Committee on Appointments, Fall 2010-11
   - Scientific Advisory Panel, Wall Institute for Advanced Studies
   - Re-appointment Committee for Vice-President Research (2009)
   - Re-appointment Committee for UBC President (2010)
   - UBC Board of Governors (2008-2014)
     - Community Development Task Group, Chair
     - Governance Committee
     - Finance Committee
     - Capital projects and planning Committee
     - Learning and Research Committee
     - People, Community & International Committee
     - Management Resources and Compensation Committee.

- UBC Presidential Search Committee, 2013-14.
- Chair, President's working group on Faculty/Staff Housing Assistance, 2014-15.

10. **SERVICE TO THE COMMUNITY**

   (a) *Memberships on scholarly societies, including offices held and dates*

- Canadian Mathematical Society
- American Mathematical Society
- Mathematical Association of America
- Royal Society of Canada
- Association Stephan Banach
- Institute of Applied Mathematics, UBC.

   (b) *Memberships on scholarly committees, including offices held and dates*

- Member of the publications committee of the C.M.S. (1991-1993).
- Member of the selection Committee for the Fermat prize, France (1993).
- Member of the NSERC grant selection committee (1993-1996).
- Chair of NSERC grant selection committee 336/337 (1995-1996).
- Member of the Math/NSERC Liaison Committee (1995-1996).
- Vice-President of the Canadian Mathematical Society (1995-1997).
- Principal coordinator, National Network for Collaboration in the math. Sciences (1996)
- Founding Director of the Pacific Institute for Mathematical Sciences (1996 - 2003)
- Canada delegate to the International Mathematics Union, 1998-2006.
- Co-founder of MITACS: the Network of Centers of Excellence: Mathematics of Information Technology & Complex Systems. Member of its Operations Committee (1999-2003).
- Member of NSERC's re-allocations steering committee for Mathematics (2000-02)
- Founding Chair of the executive committee for the *Banff International Research Station for Mathematical Innovation and Discovery* (2000-03).
- Chair of the Synge Committee of the Royal Society of Canada (2001-04).
- Member of the MPS Committee of the Royal Society of Canada (2001-04).
- Scientific Director of the *Banff International Research Station* (2004-10)
- Chief coordinator of IMSI (Association of International Mathematical Science Institutes), 2006-2010.
- Co-applicant on the MITACS "International Initiative in Mathematical Modeling of Complex Systems" (I^2M^2CS) (2007).
- Coordinator, PIMS Collaborative Research Group in PDE, 2008-2011
- Killam prize Selection Committee, Canada Council for the Arts (2007-10)
- Member of Steering Committee, PRIMA (2009-13)
- CMS Committee for Survey of Canadian Mathematics
- Scientific Director, Mprime NCE, 2011-14
- Math+X chairs selection committee, Simons Foundation, 2012
- Chair of Review Committee for "Fondation des Sciences Mathématiques de Paris", 2013
- Member of Review Committee for the Faculty of Science, University of Ottawa, March 2014
- Mitacs CEO Search committee, Fall 2014
- NSERC-Math Liaison Committee, 2016-19
- Evaluation Committee for MFO, Oberwolfach, September 2016
- MOST Outstanding Research Awards Committee, Department of Natural Science and Sustainable Development Ministry of Science and Technology, Taiwan, 2017
- University Promotion and Tenure Committee, American University of Beirut, 2017-18
- Review Committee, Institut Henri Poincaré, Paris, July 2-3, 2018

- Review Committee, Korea Institute for Advanced Study (KIAS), September 17-19, 2018

(c) *Boards*
- Board of Directors, Pacific Institute for Mathematical Sciences (1996 - 2003)
- Board of Directors, Banff International Research Station, 2003-18
- Scientific Board of the Atlantic Association for Research in the Mathematical Sciences, 2002-2007
- Board of Governors, The University of British Columbia, 2008-2014
- Board of Directors, BC Medical Association, 2008-10
- Board of Directors, MITACS Network of Centres of Excellence (1999-2003 and 2008-14)
- Board of Directors, Mprime network, 2011-14
- Scientific Advisory Board, Fondation Mathématiques de Paris, 2014 - 2016
- Scientific Advisory Board, Institute of Mathematics, Academica Sinica, Sep 2013-Aug 2019
- Board of Directors, Casa Mathematica Oaxaca, 2014-2018.

(d) *Editorships (list journal and dates)*
- Associate editor, *Annales de l'Université Paul Sabatier*, Toulouse, France (1992-2003).
- Associate editor, *Canadian Journal of Mathematics* (1992-1994).
- Associate editor, *Bulletin of the Canadian Mathematical Society* (1992-1994).
- Editor-in-Chief, *Canadian Journal of Mathematics* (1994-2002).
- Editorial Board, *Comptes-Rendus de l'Académie Royale des Sciences du Canada.*
- Associate Editor, *Communications on Pure and Applied Analysis* (2001 - 2005)
- Founding Editor-in-Chief, *Pi in the Sky* (2000-2003)
- Founding Editor-in-Chief, *PIMS Magazine* (1996-2003),
- Editorial Board, *The Open Mathematics Journal (OMAT) 2010-2018*
- Co-Editor (with J.C. Wei), special volume on MEMS in "Methods and Applications of Analysis".
- Editorial Board, *Journal of Advanced Nonlinear Studies (2010-).*

(e) *Reviewer (journals etc.)*

Transactions of the AMS, Proceedings of the AMS, Canadian Journal of Mathematics, Bulletin of the Canadian Mathematical Society, Comples-rendus de l'academic francaise des sciences, Annales de l'institut Henri Poincaré, Annales de l'institut Fourier, Annales de L'Université Paul Sabatier, Pacific Journal of Mathematics, Mathematisches Annalen, Mathematisches Zeischrift, Illinois Journal of Mathematics, Studia Mathematica, Mathematical proceedings of the Cambridge philosophical society, Contemporary Mathematics, Journal of the London Mathematical Society, Communications in P.D.E., Duke Journal of Mathematics, Journal of Differential Equations, and many others.

(f) *Reviewer (agencies, institutes)*

National Science and Engineering Research Council of Canada, US National Science Foundation, CRC College of reviewers (Canada), Killam Foundation (Canada), Ontario Centers of Excellence, Dutch Technology Foundation (Netherlands), Qatar National Research Fund (Qatar), FONDACYT (Chile), RGC (HongKong), FQRNT (Quebec), Simons Foundation (US), Leibnitz Foundation (Germany), Institut national des mathématiques et de leurs interactions, CNRS (France).

(g) *Other service to the community*
- Founding director of the *Pacific Institute for the Mathematical Sciences* PIMS, 1995
- Co-founder of the *Mathematics of Information Technology and Complex Systems Network of Centres of Excellence (MITACS-NCE)*. 1999
- Founder of the *Banff International Research Station for Mathematical Innovation and Discovery* (BIRS) 2001
- Co-founder of *Casa Matematica Oaxaca* (CMO), 2015.

Date: May 7, 2018   **Initials:**

Surname: Ghoussoub   **First Name:** Nassif

ORCID ID: https://orcid.org/0000-0001-7761-7170

- **Research monographs and memoirs**

  1. N. Ghoussoub, B. Maurey, H_δ-*embeddings in Hilbert space and Optimization on* G_δ-*sets*, Memoirs of the A.M.S. No.349 (l986) 102 pp.

  2. N. Ghoussoub, G. Godefroy, B. Maurey, W. Schachermayer, *Some Topological and Geometrical Structures in Banach Spaces,* Memoire A.M.S. Vol.70, No. 378 (1987) 120 pp.

  3. N. Ghoussoub, *Duality and Perturbation Methods in Critical Point Theory*, Research Monograph. Cambridge Tracts of math. Cambridge University Press (1993) 265 p.p.

  4. N. Ghoussoub, F. Robert, *Concentration estimates for Emden-Fowler equations with boundary singularities and critical growth*, International Mathematics Research Papers (2006) p. 1-86.

  5. N. Ghoussoub, *Selfdual partial differential systems and their variational principles,* Springer Monograph in Mathematics, Springer-Verlag, (2008) 356 p.

  6. P. Esposito, N. Ghoussoub, Y. J. Guo, *Mathematical Analysis of Partial Differential Equations Modeling Electrostatic MEMS*, Courant Institute Lecture Notes, AMS, (April 2010) 320 pp.

  7. N. Ghoussoub, A. Moradifam, *Functional Inequalities: New Perspectives and New Applications*, Mathematical Survey and Monographs series, AMS (2013) 310 pp

- **REFEREED PUBLICATIONS**

  1. M. Bowles, N. Ghoussoub, *A Theory of Transfers: Duality and convolution* (Submitted, April 16, 2018) 30 pp. https://arxiv.org/pdf/1804.08563.pdf

  2. N. Ghoussoub, S. Mazumdar, F. Robert, *The Hardy-Schrdinger Operator On The Poincaré Ball: Compactness and Mutiplicity* (April 2018) 40 pp. https://arxiv.org/pdf/1804.05991.pdf

  3. N. Ghoussoub, Y. Kim, A. Palmer, *Optimal Transport with Controlled Dynamics and Free End Times*, https://arxiv.org/abs/1803.10874, submitted (March 2018) 21 pages.

  4. A. Barton, N. Ghoussoub, *Dynamic and Stochastic Propagation of Brenier's Optimal Mass Transport,* European Jour. Applied Math, https://arxiv.org/abs/1804.10052, Submitted (February, 2018) 32pp

  5. N. Ghoussoub, Y. Kim, T. Lim, *Optimal Brownian Stopping between Radially Symmetric Marginals In General Dimensions,* https://arxiv.org/pdf/1711.02784.pdf, Submitted (November 2017) 22 pp.

  6. S. Boroushaki, N. Ghoussoub, *A Self-dual Variational Approach to Stochastic Partial Differential Equations,* https://arxiv.org/pdf/1710.01414.pdf, Submitted (October 2017) 31 pp.

  7. H. Chan, N. Ghoussoub, S. Mazumdar, S. Shakerian, L. Faria, *Mass and Extremals Associated with the Hardy-Schrödinger Operator on Hyperbolic Space,* https://arxiv.org/pdf/1710.01271.pdf, Submitted (October 2017) 22 pp.

  8. P. Esposito, N. Ghoussoub, A. Pistoia, G. Vaira, *Sign-Changing Solutions for Sobolev-critical Equations with Hardy Potential,* https://arxiv.org/abs/1709.04888, Submitted (May 2017) 58 pp.

  9. N. Ghoussoub, F. Robert, S. Shakerian, M. Zhao, *Mass and Asymptotics associated to Fractional Hardy-Schrödinger Operators in Critical Regimes*, To appear in Comm. in PDEs, https://arxiv.org/abs/1704.08658v1 (Submitted April 2017) 28 pp.

  10. N. Ghoussoub, Young-Heon Kim, Tongseok Lim, *Structure of optimal martingale transport in general dimensions*, To appear in Annals of Probability, https://arXiv:1508.01806 (2017) 55 pp.

  11. N. Ghoussoub, F. Robert, *The Hardy-Schrödinger operator with interior singularity: The remaining cases,* Calc. Var. PDE (published online, Oct. 2017) 56:149.

12. N. Ghoussoub, F. Robert, *Hardy-Singular Boundary Mass and Sobolev-Critical Variational Problems*, Analysis and PDE, Vol. 10 (2017), No. 5, p. 1017-1079.

13. M. Agueh, S. Boroushaki, N. Ghoussoub, *A dual Moser-Onofri inequality and its extensions to higher dimensional spheres*, Annales de la faculté des sciences de Toulouse Série. 6, 26 no. 2 (2017), p. 217-233.

14. N. Ghoussoub, A. Moameni, *Metric Selfduality and Monotone Vector Fields on Manifolds*, Journal of Functional Analysis, Vol. 271, Issue 6, (15 September 2016) 1652-1690

15. N. Ghoussoub, F. Robert, *Sobolev inequalities for the Hardy-Schrödinger operator: Critical dimensions and extremals*, Bulletin of Mathematical Sciences, Volume 6, Issue 1, (April 2016) 89-144

16. N. Ghoussoub, S. Shakerian, *Borderline variational problems involving fractional Laplacians and critical singularities*, Advanced Nonlinear Studies 15 (2015), 527-555

17. A. Aghajani, N. Ghoussoub, A. Mosleh Tehrani, *Pointwise lower bounds for solutions of semilinear elliptic equations and application*, Adv. Nonlinear Studies. 14: (2014) 813-837.

18. N. Ghoussoub and A. Moameni, *Optimal mass transport and symmetric representations of their cost functions*, Mathematics and Financial Economics 8 (4), 435-451 (2014)

19. N. Ghoussoub, B. Pass, *Decoupling of DeGiorgi-type systems via multi-marginal optimal transport*, Comm. Partial Differential Equations. 39(6): (2014) 1032–1047

20. N. Ghoussoub, A. Moameni, *Symmetric Monge-Kantorovich problems and polar decompositions of vector fields*, Geometric and Functional Analysis, Volume 24, Issue 4, (June 2014) 1129-1166

21. N. Ghoussoub, B. Maurey, *Remarks on multidimensional symmetric Monge-Kantorovich problems*, Discrete and Continuous Dynamical Systems-A, Issue 4, (April 2014) 1465 - 1480.

22. A. Galichon, N. Ghoussoub, *Variational representations for N-cyclically monotone vector fields*, Pacific Journal of Mathematics. 269(2) (2014) 323-340.

23. C. Cowan, N. Ghoussoub, *Regularity of semi-stable solutions to fourth order nonlinear eigenvalue problems on general domains*, Calc. Var. Partial Differential Equations. 49(1-2) (2014) 291–305.

24. M. Fazly, N. Ghoussoub, *On the Hénon-Lane-Emden conjecture*, Discrete and Continuous Dynamical Systems-A, Vol 34, Issue 6 (2014) p. 2513-2533.

25. M. Fazly, N. Ghoussoub, *De Giorgi type results for elliptic systems*, Calculus of Variations and Partial Differential Equations, Vol. 47, Issue 3 (2013) 809-823

26. N. Ghoussoub, A. Moradifam, <u>*Functional Inequalities: New Perspectives and New Applications*</u>, Mathematical Survey and Monographs series, AMS (2013) 310 pp

27. N. Ghoussoub, A. Moameni, *A self-dual polar factorization for vector fields*, Comm. Pure. Applied. Math., Vol 66, Issue 6 (2013) p. 905-933.

28. N. Ghoussoub, A. Moameni, R. Zarate, *A self-dual variational approach to the homogenization of equations driven by monotone vector fields*, Advanced Nonlinear Studies 11 (2), (2011) p. 323-360

29. N. Ghoussoub, A. Moradifam, *Simultaneous preconditioning and symmetrization of non-symmetric linear systems*, Numerical Linear Algebra with Applications, Volume 18, Issue 3 (May 2011) p. 343-349 Published online (June 28, 2010) DOI: 10.1002/nla.730

30. C. Cowan, P. Esposito, N. Ghoussoub, *Regularity of extremal solutions in fourth order eigenvalue problems on general domains*, Discrete and Continuous Dynamical Systems - Series A, Vol 28, 3 (2010) p. 1033-1050

31. N. Ghoussoub and C. S. Lin, *On the best constant in the Moser-Onofri-Aubin inequality on S^2*, Comm. Math. Physics, Vol. 298, No 3 (2010) p. 869-878

32. N. Ghoussoub, A. Moradifam, *Bessel pairs and optimal Hardy and Hardy-Rellich inequalities*, Math. Annalen, Vol. 349, No.1 (2010) p. 1-57

33. C. Cowan, N. Ghoussoub, *Estimates on pull-in distances in MEMS models and other nonlinear eigenvalue problems*, SIAM Journal on Math. Analysis, Vol. 42, No. 5 (2010) p. 1949-1966.

34. C. Cowan, P. Esposito, N. Ghoussoub, A. Moradifam, *The critical dimension for a fourth order elliptic problem with singular nonlinearity*, Arch. Ration. Mech. Anal., Vol.198, No.3, (2010) p. 763-787

35. P. Esposito, N. Ghoussoub, Y. J. Guo, *Mathematical Analysis of Partial Differential Equations Modeling Electrostatic MEMS*, <u>Courant Institute Lecture Notes</u>, AMS/CIMS, (April 2010) 320 pp.

36. N. Ghoussoub, A. Moameni, *Hamiltonian systems of PDEs and other evolution equations with selfdual boundary conditions*, Calculus of Variations and PDEs, Vol. 36, No 1 (2009) p. 85-118

37. N. Ghoussoub, A. Moameni, *Anti-symmetric Hamiltonians (II): Variational resolution of Navier-Stokes equations and other nonlinear evolutions*, Annales de l'Institut Henri Poincaré / Analyse non linéaire **26** (2009), pp. 223-255

38. D. Cassani, J.M. Do O, N. Ghoussoub, *On a fourth order elliptic problem with a singular nonlinearity*, Advances Nonlinear Studies, **9**, (2009), 177-197

39. N. Ghoussoub, F. Robert, *Elliptic equations with critical growth and large sets of boundary singularities*, Trans. Amer. Math. Soc. 361 (2009), p. 4843-4870

40. C. Cowan, N. Ghoussoub, *Regularity of the extremal solution in a model for MEMS involving advection*, Methods and Applications of Analysis, Vol. 15, No 3 (September 2008) pp. 355-362

41. P. Esposito, N. Ghoussoub, *Uniqueness of solutions for an elliptic equation modeling MEMS*, Methods and Applications of Analysis, Vol. 15, No 3 (September 2008) pp. 341-354

42. N. Ghoussoub, *A variational theory for monotone vector fields*, Journal of Fixed Point Theory and Applications, Volume 4, Number 1 (2008) p. 107-135

43. N. Ghoussoub, *Hamiltonian systems as selfdual equations*, Frontiers in Mathematics in China, Vol. 3, Number 2 (2008) p. 167 - 193

44. N. Ghoussoub, Y. J. Guo, *Estimates for the quenching time of a parabolic equation modeling electrostatic MEMS*, Methods and Applications of Analysis, Vol. 15, No 3 (2008) p. 361-376

45. N. Ghoussoub, A. Moradifam, *On the best possible remaining term in the improved Hardy inequality*, Proc. Nat. Acad. Sci., vol. 105, no. 37 (2008) 13746-13751

46. N. Ghoussoub, *Selfdual partial differential systems and their variational principles,* Springer Monograph in Mathematics, Springer-Verlag, (2008) 356 p.

47. N. Ghoussoub, *Superposition of selfdual functionals for non-homogeneous boundary value problems and differential systems*, Discrete and Continuous Dynamical Systems, Series A, Vol. 21, 1 (2008), p. 71-104.

48. N. Ghoussoub, Y. J. Guo, *On the Partial Differential Equations of Electrostatic MEMS Devices II: Dynamic Case*, Nonlinear Differential Equations and Applications, Vol. 15 No. 1-2 (2008) 31 pp.

49. N. Ghoussoub, A. Moameni, *On the existence of Hamiltonian paths connecting Lagrangian submanifolds*, C. R. Math. Rep. Acad. Sci. Canada Vol. 30 (3) (2008) p. 65-83

50. N. Ghoussoub, L. Tzou, *Anti-selfdual Lagrangians II: Unbounded non self-adjoint operators and evolution equations*, Annali di Matematica Pura ed Applicata, Vol 187, 2 (2008) p. 323-352

51. P. Esposito, N. Ghoussoub, Y. J. Guo, *Compactness along the branch of semi-stable and unstable solutions for an elliptic problem with a singular nonlinearity*, Comm. Pure & Applied Math. vol. 60, no. 12 (2007) p. 1731-1768

52. N. Ghoussoub, Y. J. Guo, *On the Partial Differential Equations of Electrostatic MEMS Devices: Stationary Case*, SIAM J. Math. Anal. Vol. 38, No. 5 pp. 1423-1449 (2007).

53. N. Ghoussoub, A. Moameni, *Selfdual variational principles for periodic solutions of Hamiltonian and other dynamical systems*, Comm. PDE 32, (2007) p. 771-795.

54. N. Ghoussoub, *Anti-symmetric Hamiltonians: Variational resolution of Navier-Stokes equations and other nonlinear evolutions*, Comm. Pure & Applied Math., vol. 60, no. 5 (2007) pp. 619-653

55. N. Ghoussoub, *Anti-selfdual Lagrangians: Variational resolutions of non self-adjoint equations and dissipative evolutions*, AIHP-Analyse non linéaire, 24 (2007) p.171-205.

56. N. Ghoussoub, L. Tzou, *Iterations of Anti-selfdual Lagrangians, Hamiltonian systems and multiparameter gradient flows*, Calculus of Variations and PDE's 26 (4) (2006) p. 511-534.

57. N. Ghoussoub, F. Robert, *Concentration estimates for Emden-Fowler equations with boundary singularities and critical growth*, International Mathematics Research Papers, (2006) p. 1-86.

58. N. Ghoussoub, F. Robert, *The effect of curvature on the best constant in the Hardy-Sobolev inequalities*, Geom. And Funct. Anal. Vol.16, 6 (2006) p. 1201-1245

59. N. Ghoussoub, Yujin Guo, *Dynamic Deflection of Electrostatic MEMS*, 2005 International Conference on MEMS, NANO and Smart Systems (2005) p. 341-345

60. N. Ghoussoub, *A theory of Anti-selfdual Lagrangians: Dynamic case*, C.R. Acad. Sci., Paris, Ser. I 340 (2005) p. 325-330

61. N. Ghoussoub, *A theory of Anti-selfdual Lagrangians: Stationary case*, C.R. Acad. Sci., Paris, Ser. I 340 (2005) p. 245-250

62. N. Ghoussoub, *A variational principle for non-linear transport equations*, Communications on Pure and Applied Analysis, Vol.4, 4 (2005) p. 735-742.

63. N. Ghoussoub, R. McCann, *A least action principle for steepest descent in a non-convex landscape*, Contemporary Math. Vol 362 (2004) p. 177-187.

64. N. Ghoussoub, X.S. Kang, *Hardy-Sobolev Critical Elliptic Equations with Boundary Singularities*, AIHP-Analyse non linéaire, Vol 21 (2004) p. 767-793

65. N. Ghoussoub, L. Tzou, *A variational principle for gradient flows*, Math. Annalen, Vol 30, 3 (2004) p. 519-549

66. M. Agueh, N. Ghoussoub, X. S. Kang, *Geometric inequalities via a general comparison principle for interacting gases*, Geom. And Funct. Anal., Vol 14, 1 (2004) p. 215-244

67. M. Agueh, N. Ghoussoub, X. S. Kang, *L'évolution de l'énergie totale d'un gaz le long d'un transport optimal et ses applications*, C. R. Acad. des Sci. (2003) p. 173-178

68. N. Ghoussoub, C. Gui, *On the De Giorgi conjecture in dimensions 4 and 5*, Annals of Mathematics, 157 (2003) p. 313-334.

69. I. Ekeland, N. Ghoussoub, *Selected new aspects of the calculus of variations in the large*, Bulletin (New Series) of the American Mathematical Society 39, No. 2, (2002) p. 207-265

70. C. Chambers, N. Ghoussoub, *Perturbations from symmetry and non-homogeneous boundary value problems*, Journal of Discrete and Continuous Dynamical Systems, Vol 8, 1, (2002) p. 267-281

71. N. Ghoussoub, C. Gui, M. Zhu, *On a singularly perturbed Neumann problem with the critical exponent*, Communications in Partial Differential Equations, Vol. 26, 11 (2002)

72. R. Deville, N. Ghoussoub, *Perturbed Minimization Principles and Applications*, Handbook on the Geometry of Banach Spaces, North Holland-Elsevier, Chapter 10 (2001), p. 393-435

73. N. Ghoussoub, C. Yuan, *Multiple Solutions for Quasi-linear PDEs Involving the Critical Sobolev and Hardy Exponents*, Trans. A.M.S, vol 352, 12 (2000) p. 5703-5743

74. P. Bolle, N. Ghoussoub, H. Tehrani, *The Multiplicity of solutions for non-homogeneous boundary value problems*, Manuscripta Math. 101 (2000) p. 325-350

75. N. Ghoussoub, C. Gui, *On a conjecture of De Giorgi and related problems*, Math. Annalen, Vol. 311 (1998) p. 481-491

76. J. Feldman, R. Froese, N. Ghoussoub, C. Gui, *An improved Moser-Aubin-Onofri inequality for axially symmetric functions on S^2*, Calculus of Variations and PDE, 6 (1998) p. 95-104

77. I. Ekeland, N. Ghoussoub, *$\mathbf{Z}_2$-Equivariant Ljusternik-Schnirelmann Theory for non-even functionals*, Annales de l'Institut Henri Poincaré, Analyse non-linéaire, Vol.15 (1998) p. 341-370

78. N. Ghoussoub, C. Gui, *Multi-peak solutions for a semi-linear Neuman problem involving the critical Sobolev exponent*, Math. Zeitschrift, 229 (1998) p. 443-474

79. N. Ghoussoub, C. Gui, *New variational methods with applications to semilinear Neumann problems involving the critical Sobolev exponent*, Special volume for the 50-th anniversary of the CMS. Invited papers (1996) p. 125-152

80. I. Ekeland, N. Ghoussoub, H. Tehrani, *Multiple Solutions for a Classical Problem in the Calculus of Variations*, Journal of differential Equations 131, No.2 (1996) p. 229-243

81. K. C. Chang, N. Ghoussoub, *The Conley Index and the Critical Groups via an extension of Gromoll-Meyer theory*, Topological Methods in Nonlinear Analysis, 7, no.1 (1996) p. 77-93

82. N. Ghoussoub, *A note on the multiplicity of surfaces with prescribed constant mean curvature*, CMS seminar on Partial Differential equations, Publications du CRM (1996/97) p. 135-144.

83. G. Fang, N. Ghoussoub, *Morse-type information on Palais-Smale sequences obtained by Min-Max principles.* Comm. Pure. Applied. Math., XLVII (1994) p.1595-1653.

84. N. Ghoussoub, *Duality and Perturbation Methods in Critical Point Theory*, Research Monograph. Cambridge Tracts of math. Cambridge University Press (1993) 265 p.p.

85. N. Ghoussoub, *A Min-Max principle with a relaxed boundary condition*, Proc. A.M.S. **117**, 2 (1993) 439-447.

86. G. Fang, N. Ghoussoub, *Second order information on Palais-Smale sequences in the Mountain Pass Theorem*, Manuscripta Math. 75 (1992) p. 81-95.

87. N. Ghoussoub, B. Maurey, W. Schachermayer, *Slicings, selections and their applications*, Canadian J. Math. **44**.3. (1992) p. 483-504

88. N. Ghoussoub, *Location, Multiplicity and Morse Indices of Min-Max Critical Points.* J. reine angew. Math 417 (1991) p. 27-76.

89. N. Ghoussoub, W. B. Johnson, *Operators which factor through Banach lattices not containing c_0.* Lecture Notes in Mathematics, Springer Verlag 1470 (1991) p. 68-71

90. N. Ghoussoub, B. Maurey, W. Schachermayer, *Geometrical implications of certain infinite dimensional decompositions*, Trans. A.M.S, Vol.317, No.2 (1990) p. 541-584

91. N. Ghoussoub, B. Maurey, W. Schachermayer, *Remarks about the interpolation of Radon-Nikodym operators.* Lecture Note series, London Math Society, 158 (1990) p. 111-119

92. N. Ghoussoub, B. Maurey, *A non-linear method for constructing certain basic sequences in Banach spaces.* Illinois J. Math, Vol 34, Number 3 (1990) p. 607-613

93. W. Davis, N. Ghoussoub, W. B. Johnson, Kwapien, B. Maurey, *Weak convergence of vector valued martingales.* Proc. of the 6th Conference on Probability in Banach spaces - Sonderborg, Denmark. Springer-Verlag (1989). A compendium by P. Orno.

94. N. Ghoussoub, J. Lindenstrauss, B. Maurey, *Analytic martingales and plurisubharmonic barriers in complex Banach spaces.* Contemporary Math. Vol. 85 (1989) p. 111-130

95. N. Ghoussoub, B. Maurey, W. Schachermayer, *Pluriharmonically dentable complex Banach spaces.* J. reine angew. Math. Band 402 (1989) p. 76-127

96. N. Ghoussoub, D. Preiss, *A General Mountain Pass Principle for locating and classifying critical points.* A.I.H.P. Analyse non linéaire, 5, Vol. 6 (1989) p. 321-330

97. N. Ghoussoub, B. Maurey, *Plurisubharmonic martingales and barriers in complex quasi-Banach spaces.* Annales Inst. Fourier, Tome 39-Fasc 4 (1989) p. 1007-1060

98. N. Ghoussoub, B. Maurey, *G_δ-embeddings in Hilbert space II*, J. Funct. Anal., Vol. 78, No.2 (1988) p. 271-305

99. N. Ghoussoub, W. B. Johnson, *Factoring operators through Banach lattices not containing $C[0,1]$*, Math Zeitsch. 194 (1987) p. 153-171

100. N. Ghoussoub, G. Godefroy, B. Maurey, W. Schachermayer, *Some Topological and Geometrical Structures in Banach Spaces,* Memoire A.M.S. Vol.70, No. 378 (1987) 120 pp.

101. N. Ghoussoub, B. Maurey, W. Schachermayer, *A counterexample to a problem about points of continuity in Banach spaces*, Proc. A.M.S. 99, 2 (1987)

102. N. Ghoussoub, B. Maurey, *H_δ-embeddings in Hilbert space and Optimization on G_δ-sets.* Memoirs of the A.M.S. No.349 (1986) 102 pp.

103. N. Ghoussoub, B. Maurey, *G_δ-embeddings in Hilbert space*, J. of Funct. Anal.. Vol. 61, 1 (1985) p.72-97

104. N. Ghoussoub, B. Maurey, *The Asymptotic-norming and the Radon-Nikodym properties are equivalent in separable Banach spaces*, Proc. A.M.S. 94, 4 (1985) p. 665-671

105. N. Ghoussoub, B. Maurey, *On the Radon-Nikodym property in Function spaces.* Proceedings of NSF-CBMS regional Conference at the University of Missouri, Springer Verlag (1985) p. 65-71

106. N. Ghoussoub, *Subadditive ergodic theory in general function spaces.* Séminaire d'Analyse-Publications de l'Université de Paris VII (1985) p. 157-177

107. N. Ghoussoub, M. Talagrand, *A non-completely continuous operator on $L^1(G)$ whose random Fourier transform is in $c_0(\hat{G})$*. Proc. A.M.S. 92, 2 (1984) p. 229-332

108. N. Ghoussoub, W. B. Johnson, *Counterexamples to several problems on the factorization of bounded linear operators*, Proc. A.M.S. Vol. 92, 2 (1984), p. 233-238

109. N. Ghoussoub, B. Maurey, *Counterexamples to several problems on G_δ-embeddings*, Proc. A.M.S. 92, 3 (1984) p. 409-412

110. N. Ghoussoub, P. Saab, *Weak Compactness in spaces of Bochner integrable functions and the Radon-Nikodym property*. Pacific J. of Math. 110, 1 (1984) p. 65-70

111. N. Ghoussoub, *Positive embeddings of $C(\Delta)$, L^1, $\ell^1(\Gamma)$ and $(\Sigma_n \oplus \ell_\infty^n)_{\ell^1}$*, Math Annalen 262 (1983) p. 461-472.

112. N. Ghoussoub, H.P. Rosenthal, *Martingales, G_δ-embeddings and Quotients of L^1*, Math. Annalen 264 (1983) p. 321-332

113. N. Ghoussoub, S. Szarek, *A note on sign-preserving operators on L^1* . Séminaire d'Analyse - Publications de l'Université Paris VII (1983) pp.133-138

114. N. Ghoussoub, *Some remarks concerning G_δ-embeddings and semiquotient maps*. The Longhorn seminar - A Publication of The University of Texas at Austin. (1982-83).

115. N. Ghoussoub, *Martingales of increasing functions* - Proceedings of the conference on martingales theory in harmonic analysis and Banach spaces - Springer-Verlag, Vol. 939, 10 (1982) p. 62-72.

116. N. Ghoussoub, *Riesz spaces valued measures and processes*. Bulletin de la Société Mathématique de France, II. 110 (1982) p. 233-257.

117. N. Ghoussoub, E. Saab, *On the range of basically scattered vector measures*. Indiana Journal of Mathematics 31, II (1982) p. 247-253

118. N. Ghoussoub, *Renorming dual Banach lattices*, Procedings A.M.S. 84, No. 4 (1982) p. 521-524.

119. W. J. Davis, N. Ghoussoub, J. Lindenstrauss, *A lattice renorming theorem and applications to vector valued processes*, Transactions A.M.S. 263 (1981) p. 531-540

120. N. Ghoussoub, *Convexity and differentiability in Banach spaces. State of the Art*. Annals of the CERE-MADE. (Mathematical techniques of optimization, control and decision) Birkhauser. Bost. Inc. (1981) p. 47-62.

121. T. Figiel, N. Ghoussoub, W. B. Johnson, *On the structure of non-weakly compact operators on Banach lattices*, Math Annalen 257 (1981) p. 217-344

122. N. Ghoussoub, *On operators fixing copies of c_0 and ℓ_∞*. Séminaire d'Analyse fonctionnelle-Publication de l'Ecole Polytechnique - Paris (1980/1981).

123. N. Ghoussoub, E. Saab, *On the weak Radon-Nikodym property*. Proceedings of A.M.S. 81 (1980) p. 81-84

124. W. J. Davis, N. Ghoussoub, J. Lindenstrauss, *Renorming Separable Banach Lattices*. Seminaire Choquet, 19eme Année, Publications de l'Université Paris VI (1980).

125. N. Ghoussoub, *Integral representation of random probabilities and its applications*. Seminaire de probabilités XVI - Springer-Verlag (1980/1981) 32 pp.

126. N. Ghoussoub, *On spaces with local unconditional structure*, Séminaire d'Analyse fonctionnelle-Publication de l'Ecole Polytechnique - Paris (1979-1980).

127. N. Ghoussoub, M. Steele, *Vector-valued subadditive processes and applications in probability*. Annals of Probability, Vol 8, No. 2 (1980), p. 83-95

128. N. Ghoussoub, M. Talagrand, *Convergence faible des potentiels de Doob vectoriels*. C. R. Acad. Sci. t. 288, Serie A, Paris (1979) p. 165-172.

129. R. V. Chacon, N. Ghoussoub, *Embeddings in Brownian motion*. Ann. Inst. Henri Poincaré, XV, No. 3 (1979) p. 287-292

130. S. R. Foguel, N. Ghoussoub, *Ornstein-Métivier-Brunel theorem revisited*. Ann. Inst. Henri Poincaré XV, No. 3 (1979) p. 293-301

131. N. Ghoussoub, M. Talagrand, *Order dentability and Radon-Nikodym property in Banach lattices*, Math Annalen, 243 (1979) p. 217-225

132. N. Ghoussoub, *Summability and vector amarts*, J. Mult. Analysis, Vol 9, No. 1 (1979) p. 173-178.

133. N. Ghoussoub, *Orderamarts, A class of asymptotic martingales.* J. Mult. Analysis, Vol 9, No. 1 (1979) p. 165-172.

134. Y. Benyamini, N. Ghoussoub, *Une caracterisation probabiliste de ℓ^1.* C.R. Acad. Sci. t.286 Serie A, Paris (1978) p. 795-797.

135. N. Ghoussoub, L. Sucheston, *A refinement of the Riesz decomposition of amarts and semi-amarts.* J. Mult. Analysis, Vol. 8, No. 1 (1978) p. 146-150

136. N. Ghoussoub, M. Talagrand, *A generalized Chacon's inequality and order convergence of processes.* Seminaire Choquet, Publications de l' Université Paris VI, 1977/78

137. N. Ghoussoub, *Banach lattices valued amarts.* Annales de l'Institut Henri Poincaré, XII, No.2 (1977) p. 159-169.

138. N. Ghoussoub, *Processus de Harris abstraits*, Annales de l'Institut Henri Poincaré, XI, No.4 (1975) p. 381-395.

- **Papers in preparation (Titles may be subject to changes)**

  1. N. Ghoussoub, S. Mazumdar, F. Robert, *The Hardy-Schrödinger operator with boundary singularity: Compactness and sign changing solutions*, Preprint (March 2018) 64pp.

  2. N. Ghoussoub, Y. Kim, A. Palmer, *Optimal Stopping for Stochastic Transport Problems with Controlled Dynamics*, In preparation 2018.

  3. N. Ghoussoub, Y. Kim, A. Palmer, *PDE Methods for Skorokhod Embedding Problems*, In preparation 2018.

  4. M. Bowles, N. Ghoussoub, *Towards a stochastic weak KAM theory*, In preparation 2018

  5. M. Bowles, N. Ghoussoub, *A theory of multi-mass transfers*, In preparation 2018

  6. N. Ghoussoub, Young-Heon Kim, Tongseok Lim, *Skorohod Embeddings and Optimal Brownian Martingale Transport,* In preparation, 2018

- **Books in preparation**

  1. N. Ghoussoub, F. Robert, *The Hardy-Schrödinger Operator,* In preparation (300 pp ready).

  2. N. Ghoussoub, B. Maurey, *Dentability, balayage and optimization on non-compact manifolds. Research monograph*, In preparation (250 pp ready).

  3. N. Ghoussoub, *Morse theory up to epsilon: Theory and Applications*, In preparation

- **Unpublished distributed research notes**

  1. A. Barton, N. Ghoussoub:*On Optimal Stochastic Ballistic Transports,* https://arXiv:1712.00047v1, (November 2017) 18pp. Incorporated in [2] of [Refereed Publications] above

  2. N. Ghoussoub: Optimal Ballistic Transport and Hopf-Lax Formulae on Wasserstein Space, https://arxiv.org/abs/1705.05951, (June 2017) 25 pp. Incorporated in [2] of [Refereed Publications] above

  3. N. Ghoussoub, F. Robert, *On the Hardy-Schrödinger operator with a boundary singularity*, Revised November (2015) 87 pp. Incorporated in [10] of [Refereed Publications] above

  4. N. Ghoussoub: *Maximal monotone operators are selfdual vector fields and vice-versa*, Unpublished posted note (2006) 9 p.

  5. N. Ghoussoub: *A theory of Anti-selfdual Lagrangians: Nonlinear case*, Unpublished posted Note (2005)

  6. C. Chambers, N. Ghoussoub: *Parameter-dependent functionals and compactness in some variational problems* (2004)

  7. M. Agueh, N. Ghoussoub, X. Kang: *Geometric inequalities via a duality between certain quasilinear PDEs and Fokker-Planck equations*, (December 2002) 23 pp.

  8. M. Agueh, N. Ghoussoub, X. Kang: *The mother of many geometric inequalities* (2003)

9. N. Ghoussoub, C. Gui, M. Zhu: *High energy solutions for a critical problem on the ball with mixed boundary conditions*, (1999)

10. G. Fang, N. Ghoussoub: *Morse-type information on Palais-Smale sequences II. Homological case*, Unpublished manuscript (1999) 35 pp

11. G. Fang, N. Ghoussoub: *A C^1-proof for an equivariant min-max principle*, Unpublished manuscript (1996) 10pp

12. J. Burdeau, N. Ghoussoub: *The Palais-Smale condition around dual sets and borderline variational problems.* Unpublished manuscript (1995) 25 pp.

13. N. Ghoussoub, B. Maurey: *First class functions around sets and geometrically regular Banach spaces.* A distributed unpublished manuscript incorporated in [66] above (1985).

14. N. Ghoussoub, W. B. Johnson: *On J. Borwein's concept of sequentially reflexive Banach spaces*, An electronically distributed note (1991)

15. N. Ghoussoub, W. B. Johnson: *On subspaces of Banach lattices not containing $C(\Delta)$.* A distributed unpublished manuscript (1983) 28 pp.

- **Other writings**

1. N. Ghoussoub: *The Pacific Institute for the Mathematical Sciences*, Notices of the American Mathematical Society, Vo; 44, No 11 (1997) p. 448-450

2. N. Ghoussoub, Klaus Hoechsmann: *Mathematics: A Tool for Questioning*, Pi in the Sky magazine, September 2002, p. 9-11

3. N. Ghoussoub, *How recent changes in federal investment in research impact the academic mission of UBC*, Ubyssey, November 2012

4. N. Ghoussoub, *Buying $300 million worth of research excellence,* University World News, February 2013.

5. N. Ghoussoub, B. Pass, *Optimal Transport: From moving soil to same-sex marriage*, CMS Notes, vol. 45, n. 3 (June 2013)

6. N. Ghoussoub, More than 400 blog posts, *Piece of Mind*, November 2010 -