

## Curriculum Vitae

Alessandro MORANDO  
born in Torino, Italian citizenship

### Titoli di studio

1. *Degree in Mathematics*, University of Torino, academic year 1996/97; grades 110/110 cum laude; title of degree's thesis: "Sulla stabilità di una caratterizzazione dell'entropia di Shannon e questioni connesse"; Advisor: Prof. Fulvia Skof;
2. *Ph. D in Mathematics*, University of Genova, February 14, 2003; title of the dissertation "Some classes of  $L^p$  bounded pseudo-differential operators and applications to multi-quasi-elliptic PDE's"; Advisor: Prof. Luigi Rodino.

### Foreign Languages

English, French

### Current Position

Researcher in Mathematical Analysis, at Department of Civil, Environmental, Architectural Engineering and Mathematics - University of Brescia

### Abilitazioni Scientifiche

28/03/2017: achievement of the National Scientific Abilitation for the role of Associate Professor in Mathematical Analysis.

### Teaching Activity

*A.A. 1999/2000:*

- i. esercitazioni di Analisi Matematica I, corso di Laurea in Ingegneria Gestionale, Prima Facoltà di Ingegneria, Politecnico di Torino;

- ii. esercitazioni di Istituzioni di Matematiche I e II, corso di Diploma Universitario in Edilizia, Facoltà di Architettura, Politecnico di Torino;

*A.A. 2000/01, 2001/02:* esercitazioni di Istituzioni di Matematica, corso di Laurea in Farmacia, Facoltà di Farmacia, Università di Torino;

*A.A. 2004/05:*

- i. esercitazioni di Analisi Matematica C, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica, primo modulo, corso di Laurea in Informatica, Facoltà di Scienze M.F.N., Università di Torino;
- iii. tutorato di Funzioni in più variabili, corso di Laurea in Fisica, Facoltà di Scienze M.F.N., Università di Torino.

*A.A. 2005/06:* esercitazioni di Analisi Matematica C, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2006/07:*

- i. Analisi Matematica A, corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica C, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2007/08:*

- i. Analisi Matematica A, corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica C, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2008/09:* esercitazioni di Analisi Matematica C, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2009/10:*

- i. Analisi Matematica 1, corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2010/11:*

- i. Analisi Matematica 1, corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2011/12:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2012/13:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Facoltà di Ingegneria, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Facoltà di Ingegneria, Università di Brescia.

*A.A. 2013/14:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Università di Brescia.

*A.A. 2014/15:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Università di Brescia.

*A.A. 2015/16:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Università di Brescia.

*A.A. 2016/17:* esercitazioni di Analisi Matematica 2, Università di Brescia.

*A.A. 2017/18:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Università di Brescia.

*A.A. 2018/19:*

- i. Analisi Matematica A (primo modulo del corso di Analisi Matematica), corso di Laurea in Ingegneria Gestionale, Università di Brescia;
- ii. esercitazioni di Analisi Matematica 2, Università di Brescia.

### **Grants and fellowships**

- \* *April 2002 - December 2004:* Post-doc position at Department of Mathematics of University of Brescia, Engineering Faculty; title of the project “Teoria e applicazioni delle equazioni iperboliche non lineari”, scientific advisor Prof. Paolo Secchi.

- \* *October 2003 - January 2004, May - June 2004*: research fellowship at the Unit  de Math matiques Pures et Appliqu es of the  cole Normale Sup rieure de Lyon (France), by a TMR grant (Training and Mobility of Researchers) delivered by the network HYKE (Hyperbolic and Kinetic Equations) of European Union, under the supervision of Prof. Denis Serre.
- \* *January - April 2005*: Post-doc position at Department of Mathematics of University of Torino; title of the project “Equazioni differenziali e operatori pseudodifferenziali”, scientific advisor Prof. Ernesto Buzano.
- \* *May 2005 - June 2006*: Post-doc position at Department of Mathematics of University of Brescia, Engineering Faculty; title of the project “Equazioni alle derivate parziali di tipo iperbolico”, scientific advisor Prof. Paolo Secchi.

### **Further professional experiences**

- \* Refereeing activity for the following scientific Journals: Abstract and Applied Analysis, Advances in Mathematical Physics, Applicable Analysis, Applications and Applied Mathematics: An International Journal (AAM), Boundary Value Problems, Communications on Pure and Applied Analysis, Discrete and Continuous Dynamical Systems, Journal of Differential Equations, Journal of Hyperbolic Differential Equations, Journal of the London Mathematical Society, Journal of Mathematical Analysis and Applications, Mathematische Nachrichten, Mediterranean Journal of Mathematics, Physica D: Nonlinear Phenomena, SIAM Journal on Mathematical Analysis, Taiwanese Journal of Mathematics, Zeitschrift fuer Angewandte Mathematik und Physik.
- \* Rewiever’s activity for Mathematical Reviews of the American Mathematical Society.

### **Schools and Congress organization**

- 2006: Member of the organizing Committee of *Advanced Course on PDEs 2006*, for the course *High-Frequency limits of Hydrodynamic*

*Models: application to 3D Euler, Navier-Stokes and MHD equations*, delivered by Prof. B. Nicolaenko.

- 2014: Member of the organizing Committee of the Conference “Fluid Dynamics and Electromagnetism: theory and numerical approximation” (on the occasion of Professor Paolo Secchi and Professor Alberto Valli 60th birthday), Levico Terme, Trento, June 3–6, 2014.

### **Editorial Board**

Guest editor for the volume 9 (1) 2016, pages 1-362, 2016 of “Discrete and Continuous Dynamical Systems, Series S”. Volume title: *Issue on fluid dynamics and electromagnetism: Theory and numerical approximation*. Publication date: 1/02/2016.

### **Institutional charges**

- Member of the Committee of several competitions for the attribution of post doc fellowship, at University of Brescia.
- Member of the evaluation Committee for the Ph. D School of “Metodi e Modelli Matematici per l’Ingegneria” at the University of Brescia.
- Member of the evaluation Committee for Engineering degree’s attribution at the University of Brescia.
- Member of the Committee for the access to Engineering courses at the University of Brescia.
- Member of the Committee for a Researcher position (art. 24, comma 3, lett. a) della Legge n. 240/2010 per il S. C. 01/A3) in Mathematical Analysis, at University of L’Aquila.

### **Research projects**

#### **National**

- Progetto PRIN 2002  
 Research title: *Equazioni iperboliche non lineari: dinamica dei fluidi e modelli di traffico*  
 Scientific coordinator: Prof. Pierangelo Marcati  
 Scientific supervisor: Prof. Rinaldo M. Colombo
- Progetto PRIN 2007  
 Research title: *Equazioni della Dinamica dei Fluidi di tipo Iperbolico e Leggi di Conservazione*  
 Scientific coordinator: Prof. Stefano Bianchini  
 Scientific supervisor: Prof. Paolo Secchi
- Progetto PRIN 2009  
 Research title: *Equazioni della Dinamica dei Fluidi di tipo Iperbolico e Leggi di Conservazione*  
 Scientific coordinator: Prof. Stefano Bianchini  
 Scientific supervisor: Prof. Paolo Secchi
- Progetto PRIN 2012  
 Research title: *Nonlinear Hyperbolic Partial Differential Equations, dispersive and Transport Equations: theoretical and applicative aspects*  
 Scientific coordinator: Prof. Stefano Bianchini  
 Scientific supervisor: Prof. Paolo Secchi
- Progetto PRIN 2015  
 Protocollo 2015YCJY3A 004  
 Scientific coordinator: Prof. Stefano Bianchini  
 Scientific supervisor: Prof. Paolo Secchi

2002-2019: subscription to the national group INdAM for Mathematical Analysis, Probability and their Applications (G.N.A.M.P.A.), *Equazioni Differenziali e Sistemi Dinamici* division.

### **Local**

- 2006-2012: Unità di Ricerca locale, at Department of Mathematics of University of Brescia. Research title: *Teoria delle Equazioni alle Derivate Parziali*; scientific supervisor: Prof. Paolo Secchi.

- 2013-2014: Unità di Ricerca locale, at Department of Civil, Environmental, Architectural Engineering and Mathematics (Mathematical Division) of University of Brescia. Research title: *Teoria delle Equazioni alle Derivate Parziali*; scientific supervisor: Prof. Paolo Secchi.
- 2015-2018: Unità di Ricerca locale, at Department of Civil, Environmental, Architectural Engineering and Mathematics (Mathematical Division) of University of Brescia. Research title: *Problemi sulle Equazioni alle Derivate Parziali*; scientific supervisor: Prof. Paolo Secchi.

### Responsibility of funds

2018: Attribution of FABBR national grant “Finanziamento annuale individuale delle attività base di ricerca”.

### Research topics

Partial Differential Equations, Fourier transform, Pseudodifferential operators. Hyperbolic Problems. Fluid Dynamics.

### Communications, seminars and posters

1. *Some Remarks about Hypoellipticity and Local Solvability of Linear Partial Differential Operators in Gevrey classes*, Perturbative Methods for Partial Differential Equations and Dynamical Systems, Cagliari, October 23-28, 2000;
2. *A class of  $L^p$  bounded Pseudodifferential Operators*, Third International ISAAC Congress, Berlin, August 20-25, 2001;
3. *Sur la stabilité des discontinuités de contact pour les équations d'Euler non isentropiques*, seminar delivered in the framework of Séminaire Équations aux Dérivées Partielles et Applications, at the U.M.P.A. École Normale Supérieure de Lyon, Lyon, June 3, 2004;
4. *Inhomogeneous Gevrey Functions and Ultradistributions*, Spaces of Ultradifferentiable Functions and Applications, Torino, September 10-14, 2004;



5. *A result of  $L^2$ -well posedness concerning the System of Linear Elasticity*, IPERPISA 2004, XI Incontro Nazionale sulle Equazioni Iperboliche, Pisa, October 20-22, 2004;
6. *On the  $L^p$  boundedness of a class of pseudo-differential operators in  $R^n$* , Fifth International ISAAC Congress, Catania, July 25-30, 2005.
7. *On the  $L^2$ -well posedness of an initial boundary value problem for the linear elasticity in two and three space dimensions*, Eleventh International Conference on Hyperbolic Problems. Theory, Numerics, Applications, Lyon, July 17-21, 2006;
8.  *$L^2$ -well posedness of an initial boundary value problem for the linear elasticity*, IPERPD 2006, 12th Meeting on Hyperbolic Equations, Padova, September 13-15, 2006;
9. *Linear stability of contact discontinuities for the nonisentropic Euler equations in two space dimensions*, Fluides en rotation en géophysique, Losanne, September 19-22, 2006;
10. *Linear stability of nonisentropic compressible vortex sheets in two space dimensions*, Interplay between Pseudo-differential Operators and PDEs, Torino, January 18-20, 2007.
11. *On the  $L^2$ -well posedness of an initial boundary value problem for the linear isotropic elasticity*, invited talk delivered at the Workshop “Incontro sulle EDP nella meccanica dei continui”, Pisa, March 28-29, 2007.
12. *On the well posedness of an initial boundary value problem for linear isotropic elasticity*, invited talk delivered at the Conference “International Conference Differential Equations and Related Topics”, Moscow, May 21-26, 2007.
13. *Stability of incompressible current-vortex sheets*, International Summer School on Evolution Equations, Prague, June 16-20, 2008.
14. *Regularity of characteristic boundary value problems for linear hyperbolic systems*, invited talk delivered at the Conference “Second conference on Pseudo-Differential Operators and Related Topics”, Växjö, June 23-27, 2008.

15. *Regularity of characteristic boundary value problems for linear hyperbolic systems*, Sixth meeting on Hyperbolic Conservation Laws: Recent results and Research perspectives, L'Aquila, July 17-19, 2008.
16. *Stability of incompressible current-vortex sheets*, Navier-Stokes equations: Classical and generalized models, Pisa, September 23, 2008.
17. *Regolarità delle soluzioni di problemi al bordo e ai valori iniziali, con frontiera caratteristica, per sistemi simmetrizzabili*, IperBA09, XIII Incontro Nazionale sui Problemi di Tipo Iperbolico, Bari, February 11-13, 2009.
18. *Regularity of solutions to characteristic initial-boundary value problems for symmetrizable systems*, Giornata di studio Topics of Fluid Dynamics, Brescia, April 6, 2009.
19. *Regularity of characteristic initial-boundary value problems for symmetrizable systems*, invited talk delivered at the Conference "Seventh International ISAAC Congress", London, July 13-18, 2009.
20. *Regularity of weakly well posed characteristic boundary value problems*, Intensive Research Month on Hyperbolic Conservation Laws and Fluid Dynamics, fourth week, Parma, February 22-26, 2010.
21. *Regularity of weakly well posed characteristic boundary value problems*, poster, International Congress in Mathematical Fluid Dynamics and its applications, Rennes, June 21-24, 2010.
22. *Regularity of weakly well posed characteristic initial-boundary value problems*, Eighth Meeting on Hyperbolic Conservation Laws and Fluid Dynamics, Trieste, September 2, 2010.
23. *Nonlinear a priori estimates for 3D incompressible current-vortex sheets*, International Conference on Structural Nonlinear Dynamics and Diagnosis, Marrakech, April 30 - May 2, 2012.
24. *Well-posedness of the linearized plasma-vacuum interface problem in ideal incompressible MHD*, International Winter School on Mathematical Fluid Dynamics, Levico Terme (Trento), December 16 - 21, 2012.

25. *Contact discontinuities in 2D compressible MHD*, Mathematical Theory in Fluid Mechanics, 13th School, Kàcov, May 24 - 31, 2013.
26. *Contact discontinuities in 2D compressible MHD*, Tenth Meeting on Hyperbolic Conservation Laws: Recent results and Research perspectives, L'Aquila, July 11-12, 2013.
27. *Well posedness of the linearized problem for MHD contact discontinuities in 2D*, invited talk delivered at the special session "Functional Analysis and Partial Differential Equations" of the Conference "First Joint International Meeting of the Italian and Spanish Mathematical Societies RSME-SCM-SEMA-SIMAI-UMI", Bilbao, June 30 - July 4, 2014.
28. *The linearized problem for MHD contact discontinuities*, invited talk delivered at the Conference "Redessiner  $\partial(\ )$ : REvISitiNg DEcadES of conseRvation laws", Lyon, November 5 - 7, 2014.
29. *Existence of approximate current-vortex sheets near the onset of instability. Part II*, "IperGSSI2015 - 16th Italian Meeting on Hyperbolic Equations", L'Aquila, October 22 - 24, 2015.
30. *Inhomogeneous microlocal propagation of singularities in Fourier Lebesgue spaces*, "A Life in Mathematics. Generalized Functions, Microlocal Analysis, PDES and Dynamical Systems. Conference in memory of Todor V. Gramchev", Torino, February 1 - 3, 2017.
31. *Approximate current-vortex sheets near the onset of instability*, invited talk delivered at the Conference "BAMC 2017. The 59th British Applied Mathematics Colloquium", University of Surrey, Guildford, April 10 - 12, 2017.
32. *Approximate current-vortex sheets near the onset of instability*, invited talk delivered at the Department of Mathematics and Informatics of University of Ferrara, Ferrara, November 22, 2017.
33. *Approximate current-vortex sheets near the onset of instability*, invited talk delivered at the Conference "Equazioni alle Derivate Parziali nella Dinamica dei Fluidi", at Centro di Ricerca Matematica E. De Giorgi, Pisa, February 5 - 7, 2018.

34. *Local existence of 2D nonisentropic compressible vortex sheets*, XVII International Conference on Hyperbolic Problems: Theory, Numerics, Applications, University Park, Pennsylvania, USA, June 25 - 29, 2018.

### Published articles and proceedings

1. A. Morando, *A stability result concerning the Shannon entropy*, Aequationes Math. **62** (2001), 286-296;
2. G. Garello, A. Morando, *A class of  $L^p$  bounded pseudodifferential operators*, Progress in Analysis, Vol. I, II (2003), 689-696, Proc. Third International ISAAC Congress, Berlino 2001;
3. G. Garello, A. Morando,  *$L^p$ -bounded pseudodifferential operators and regularity for multi-quasi-elliptic equations*, Integral Equations Operator Theory **51** (2005), 501-517;
4. A. Morando, *Hypoellipticity and local solvability of pseudolocal continuous linear operators in Gevrey classes*, Tsukuba J. Math. **28**(1) (2004), 137-153;
5. G. Garello, A. Morando  *$L^p$ -boundedness for pseudodifferential operators with non smooth symbols and applications*, Boll. Unione Mat. Ital. Sez. B Artic. Ric. Mat. (8) **8** (2005), 461-503.;
6. A. Morando, P. Secchi, *On 3D slightly compressible Euler equations*, Port. Math. (N.S.) **61** (2004), 301-316;
7. G. Garello, A. Morando, *Continuity in weighted Sobolev spaces of  $L^p$  type for pseudo-differential operators with completely nonsmooth symbols*, Oper. Theory Adv. Appl., **155** (2004), 91-106, Proc. Fourth International ISAAC Congress, Toronto 2003;
8. J.-F. Coulombel, A. Morando, *Stability of contact discontinuities for the nonisentropic Euler equations*, Ann. Univ. Ferrara - Sez. VII - Sc. Mat. **L** (2004), 79-90;
9. D. Calvo, A. Morando, L. Rodino, *Inhomogeneous Gevrey classes and ultradistributions*, Special issue dedicated to J. Horváth. J. Math. Anal. Appl. **297** (2004), 720-739;

10. G. Garello, A. Morando, *Continuity in weighted Besov spaces for pseudo-differential operators with non-regular symbols*, Oper. Theory Adv. Appl., **160** (2005), 195-216, Proc. IWOTA Fourteenth International Workshop on Operator Theory and Applications, Cagliari 2003;
11. G. Garello, A. Morando,  *$L^p$  continuity for pseudodifferential operators*, Oper. Theory Adv. Appl., **164** (2006), 79-94, Proc. Pseudo-differential Operators and Related Topics, Växjö 2004;
12. A. Morando, D. Serre, *A result of  $L^2$ -well posedness concerning the system of linear elasticity in 2D*, Comm. Math. Sci. **3**(3) (2005), 317-334.
13. A. Morando,  *$L^p$ -regularity for a class of pseudodifferential operators in  $R^n$* , J. Partial Diff. Equations. **18** (2005), 241-262;
14. D. Calvo, A. Morando, *Multi-anisotropic Gevrey classes and ultradistributions*, J. Appl. Funct. Anal. **3** (2008),no. 2, 139-162.
15. A. Morando, D. Serre, *On the  $L^2$ -well posedness of an initial boundary value problem for the 3D linear elasticity*, Comm. Math. Sci. **3**(4) (2005), 575-586.
16. G. Garello, A. Morando, *Continuity in quasi-homogeneous Sobolev spaces for pseudo-differential operators with Besov symbols*, Oper. Theory Adv. Appl., **172** (2007), 161 - 172, Proc. Fifth International ISAAC Congress, Catania 2005.
17. A. Morando, D. Serre, *On the  $L^2$ -well posedness of an initial boundary value problem for the linear elasticity in two or three space dimensions*, Hyperbolic Problems: Theory, Numerics, Applications (2008), 747-753, Proc. Eleventh International Conference on Hyperbolic Problems; Theory, Numerics, Applications, Lione 2006.
18. A. Morando, P. Trebeschi, *Stability of contact discontinuities for the nonisentropic Euler equations in two dimensions*, Hyperbolic Problems: Theory, Numerics, Applications (2008), 1053-1060, Proc. Eleventh International Conference on Hyperbolic Problems; Theory, Numerics, Applications, Lione 2006.

19. A. Morando, P. Trebeschi, *Two-dimensional vortex sheets for the non-isentropic Euler equations: linear stability*, J. Hyperbolic Diff. Equ. **5**, No. 3 (2008), 487 - 518.
20. G. Garello, A. Morando, *Regularity for quasi-elliptic pseudo-differential operators with symbols in Hölder classes*, Oper. Theory Adv. Appl., **189** (2009), 247-264, Proc. International ISAAC Congress, Ankara August 13 - 18, 2007.
21. A. Morando, Y. Trakhinin, P. Trebeschi, *Stability of incompressible current-vortex sheets*, J. Math. Anal. Appl., **347** (2008), 502 - 520; doi:10.1016/j.jmaa.2008.06.002.
22. A. Morando, P. Secchi, P. Trebeschi, *Regularity of solutions to characteristic initial-boundary value problems for symmetrizable systems*, J. Hyperbolic Diff. Equ. **6**, No. 4 (2009), 753 - 808.
23. P. Secchi, A. Morando, P. Trebeschi, *Hyperbolic problems with characteristic boundary*, J. Nečas Center for Mathematical Modeling, Prague, Lecture Notes vol. 5 (2009), 135-200.
24. A. Morando, P. Secchi, P. Trebeschi, *Characteristic initial-boundary value problems for symmetrizable systems*, Rend. Sem. Mat. Univ. Pol. Torino **67**, No. 2 (2009), 229 - 245. Proc. Second Conference on Pseudo-Differential Operators, Växjö 2008.
25. G. Garello, A. Morando,  *$L^p$ -microlocal regularity for pseudodifferential operators of quasi-homogeneous type*, Complex Var. Elliptic Equ., **54**, No. 8 (2009), 779 - 794, Proc. Second Conference on Pseudo-differential Operators, Växjö 2008.
26. A. Morando, P. Secchi, *Regularity of weakly well posed characteristic boundary value problems*, Int. J. Differ. Equ., Volume 2010(2010), Art. ID 524736, 39 pp. doi:10.1155/2010/524736.
27. A. Morando, P. Secchi, *Regularity of weakly well posed hyperbolic problems with characteristic boundary*, J. Hyperbolic Diff. Equ. **8**, No. 1 (2011), 37 - 99; doi:10.1142/S021989161100238X.

28. A. Morando, P. Secchi, *Weakly well posed characteristic hyperbolic problems*, Riv. Mat. Univ. Parma **3** (2012), 147 - 162, Proc. Intensive Research Month on Hyperbolic Conservation Laws and Fluid Dynamics - Parma, 1-28 febbraio 2010.
29. J.-F. Coulombel, A. Morando, P. Secchi, P. Trebeschi, *A priori estimates for 3D incompressible current-vortex sheets*, Commun. Math. Phys. **311** No. 1 (2012), 247 - 275; doi: 10.1007/s00220-011-1340-8.
30. A. Morando, P. Trebeschi, *Regularity of weakly well posed non characteristic boundary value problems*, J. Pseudo-Differ. Oper. Appl. **3** No. 4 (2012), 421-472; doi:10.1007/s11868-012-0055-8.
31. G. Garello, A. Morando,  *$L^p$  microlocal properties for multi-quasi-elliptic pseudodifferential operators*, Pliska Stud. Math. Bulgar. **21** (2012), 71 - 96; Proc. International Conference on Partial Differential Equations and Applications - Sofia, 14 - 16 settembre 2011.
32. A. Morando, P. Trebeschi, *Weakly well posed hyperbolic initial-boundary value problems with non characteristic boundary*, Methods Appl. Anal. **20** No. 1 (2013), 1 - 32.
33. A. Morando, P. Secchi, P. Trebeschi, *On a Priori Energy Estimates for Characteristic Boundary Value Problems*, J. Fourier Anal. Appl. **20**, No. 4 (2014), 816 - 864; doi:10.1007/s00041-014-9335-4.
34. A. Morando, Y. Trakhinin, P. Trebeschi, *Well-posedness of the linearized plasma-vacuum interface problem in ideal incompressible MHD*. Quart. Appl. Math. **72** No. 3 (2014), 549 - 587.
35. A. Morando, Y. Trakhinin, P. Trebeschi, *The linearized plasma-vacuum interface problem in ideal incompressible MHD*. Hyperbolic Problems: Theory, Numerics, Applications, AIMS on Applied Mathematics, vol. **8**(2014), 1007 - 1014, Proc. Fourteenth International Conference on Hyperbolic Problems; Theory, Numerics, Applications, Padova 2012.
36. G. Garello, A. Morando,  *$L^p$  microlocal properties for vector weighted pseudo-differential operators with smooth symbols*, Fourier Analysis,

Trends in Mathematics, 133-148, 2014 Springer International Publishing Switzerland, ISBN978-3-319-02549-0. Proc. Fourier Analysis and Pseudo-Differential Operators, Helsinki 25 - 30 giugno 2012.

37. D. Catania, A. Morando, P. Trebeschi, *Global attractor for the Navier-Stokes equations with fractional deconvolution*, NoDEA Nonlinear Differential Equations Appl. **22** (2015), no. 4, 811 - 848; doi:10.1007/s00030-014-0305-y.
38. A. Morando, Y. Trakhinin, P. Trebeschi, *Well-posedness of the linearized problem for MHD contact discontinuities*, J. Differential Equations **258** No. 7 (2015), 2531–2571. doi:10.1016/j.jde.2014.12.018.
39. G. Garello, A. Morando, *Microlocal regularity of Besov type for solutions to quasi-elliptic non linear partial differential equations*. Pseudo-differential Operators and Generalized Functions. Operator Theory: Advances and Applications **245**, 79–94, 2015. Birkhäuser, ISBN: 978-3-319-14617-1. Proc. 9th ISAAC Congress, Cracovia 5 - 9 agosto 2013.
40. A. Morando, P. Secchi, P. Trebeschi, *Approximate current-vortex sheets near the onset of instability*, J. Math. Pures Appl. **105** (2016), 490–536 doi: 10.1016/j.matpur.2015.11.006
41. A. Morando, Y. Trakhinin, P. Trebeschi, *On local existence of MHD contact discontinuities*, Discrete and Continuous Dynamical Systems - Series S(DCDS-S) **9** No. 1 (2016), 289–313.
42. G. Garello, A. Morando, *m-Microlocal elliptic pseudodifferential operators acting on  $L^p_{loc}(\Omega)$* , Math. Nachr. **289**, No.14–15, 1820–1837 (2016)/DOI 10.1002/mana.201400151.
43. A. Morando, P. Secchi, P. Trebeschi, *Existence of approximate current-vortex sheets near the onset of instability*, J. Hyperbolic Diff. Equ. **14**, No. 2 (2017), 193 - 248; doi:10.1142/S0219891617500060.
44. A. Morando, P. Secchi, P. Trebeschi, *Data dependence of approximate current-vortex sheets near the onset of instability*, J. Hyperbolic Diff. Equ. **14**, No 3 (2017), 517–534; doi: 10.1142/S0219891617500175.



45. A. Morando, P. Secchi, P. Trebeschi, *On the weakly nonlinear Kelvin-Helmholtz instability of current-vortex sheets*. Nonlinear Differential Equations Appl. **24** (2017), no. 4, Art. 34, 18 pp.
46. A. Morando, Y. Trakhinin, P. Trebeschi, *Local existence of MHD contact discontinuities*, Arch. Rational Mech. Anal. **228** (2018), no. 2, 691–742. doi:10.1007/s00205-017-1203-3.
47. G. Garello, A. Morando, *Inhomogeneous microlocal propagation of singularities in Fourier Lebesgue spaces*, J. Pseudo-Differ. Oper. Appl. **9**(1) (2018), 47–93. doi:10.1007/s11868-016-0179-3.
48. A. Morando, P. Trebeschi, T. Wang, *Two-dimensional vortex sheets for the nonisentropic Euler equations: Nonlinear stability*, J. Differential Equations **266** No. 9 (2019), 5397–5430. doi:10.1016/j.jde.2018.10.029.

### Editorial papers

1. A. Alonso Rodriguez, L. C. Berselli, A. Morando, P. Trebeschi. Preface, *Special Issue on “Fluid dynamics and electromagnetism: theory, numerical approximation”*. Discrete and Contin. Dyn. Syst. Ser. S **9** (2016), no. 1, i. 76-06 (78-06).
2. H. Beirão da Veiga, A. Morando, P. Trebeschi, *The research of Paolo Secchi*. Discrete and Contin. Dyn. Syst. Ser. S **9** (2016), no. 1, iii-ix.

### Preprints

1. A. Morando, P. Secchi, P. Trebeschi, *On the evolution equation of compressible vortex sheets*, preprint arXiv:1806.06740. Submitted.
2. A. Morando, P. Trebeschi, Y. Trakhinin, *Structural stability of shock waves in 2D compressible elastodynamics*, preprint arXiv:1903.08245. Submitted.

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