

SHORT CV

Maria Rosaria Lancia

PRESENT POSITION: Associate Professor of Mathematical Analysis, Qualified as Full Professor in Mathematical Analysis.

EDUCATIONAL BACKGROUND:

1988 Laurea in Mathematics 110/110 Magna cum laude, University of Rome La Sapienza.

FELLOWSHIPS: C.I.R.A. (Italian Center for aerospace research) fellowship 1987. C.N.R.(National Research Council) fellowship 1989.

ACCADEMIC CAREER: November 1991 -October 2005, Assistant Professor (Mathematical Analysis) at the University of Rome La Sapienza . 1993, Ph.D. in Applied and Theoretical Mechanics. November 2005- present, Associate Professor in Mathematical Analysis.

RESEARCH INTERESTS: Dirichlet forms and fractals,functional spaces on d-sets, fractals, boundary value problems in domains with boundary and/or interface of fractal type. Non linear energy forms on unbounded self-similar fractal sets.Energy forms on non self-similar fractal sets. Heat diffusion in fractal domains. Semilinear, quasilinear evolution problems in fractal domains, possibly with nonlocal terms, with dynamical boundary conditions. Approximation of BVPs in fractal domains with dynamical BCNs. NON local models in non smooth domains. Vector Analysis on Fractafolds. Shape optimization. Numerical approximation of some BVP's in prefractal domains. Subelliptic operators of Hoermander type. Linear and non linear elasticity. BVPs in domains with edges and singularities: boundary integral formulations for some problems in fluidodynamics.

PROFESSIONAL SOCIETIES/ MEMBERSHIPS

UMI (Italian Mathematical Union) SIMAI (Italian Society of industrial Applied mathematics)GNAMPA (National Group of Mathematical Analysis, Propability and its applications)

PROFESSIONAL EXPERIENCE

Reviewer of AMS (Americal Mathematical Society)

Reviewer of J.of Computational physics, Physica D, Applicable Analysis,Mathematical Methods in the Applied Sciences, NORWA, ZAMM, DCDS series -B, JFA, DCDS-S, J.Elasticity

Reviewer for F.I.R.B.(M.I.U.R),A.N.V.U.R., Talent research, Re.Pri.Se

EDITORIAL BOARDS: Journal of Applied Mathematics and Computation, Hill Publishing Group; Fractal and Fractional, MDPI

MEMBERSHIPS OF RESEARCH PROJECTS/ACTIVITIES

COFIN 1998 Dirichlet forms and fractals,COFIN2003:Non linear differential problems algorithms, analysis and applications,COFIN 2005:Extension of continuum physics to non regular bodies. Progetti di ateneo 2000-2008,Progetti di ricerca Sapienza 2015 : Frattali dinamici e applicazioni. P.I. of Progetto di Ateneo Federato 2008: Heat diffusion on fractal domains, P.I. Progetto di Ateneo Federato 2009: Transmission phenomena across fractal structures. P.I.of Progetti di Ricerca di Universita' 2013 : Diffusion phenomena across fractal structures, P.I. of Progetti di Ricerca di Universita' 2014 : Fractal structures and Fluids. P.I. 2017: Boundary Value Problems with Integrodifferential Terms on Fractafolds. P.I.2018: Vector Boundary Value Problems on fractafolds. SEAL of EXCELLENCE MSCA IF 2018. P.I.2019: A constructive approach to some problems of analysis on fractals and on irregular structures.

INTERNATIONAL AGREEMENTS

Responsible of the International agreement between Sapienza and W.P.I. (USA) for research activities on fractal fibers and homogenization.

Responsible of International agreement between Sapienza and Steklov Mathematical Institute of Russian Academy of Sciences for research activities on PDEs in non regular domains.

MEMBERSHIPS of ACADEMIC BOARDS

Member of the academic board of the PhD in Mathematical Models for Engineering, Electromagnetics and Nanosciences

P.I. of INTERNATIONAL project : Fast diffusion across fractal interfaces ([https:// www.sbai.uniroma1.it](https://www.sbai.uniroma1.it) / Fast diffusion across fractal interfaces) main participants M.Hinz university of di Bielefeld, A.Teplyaev, University of Connecticut, A.Velez Santiago University of Puertorico, A.Nazarov University of St.Petersburg, Anna Rozanova-Pierrat Centrale Supélec Paris, U.Mosco WPI, MA Usa.

ORGANIZATION OF CONFERENCES AND MINYSIMPOSIA

- International Conference "Perspectives in PDEs, in honour of U.Mosco, Roma, 24-26 giugno 2009.
- International Conference " Homogenization : flows in collapsing domains and composite materials" Roma, 25-27 giugno 2012.
- Minicourse : "About the use of differential 1-forms on the Sierpinski Gasket and other fractals" prof. A.Teplyaev, University of Connecticut 15-16 aprile e 6 e 7 maggio 2015, Dept. SBAI
- Special session "Variational convergence and Degeneracies in PDES: fractal domains, composite media, dynamical boundary conditions", AIMS2016 Orlando, USA
- One day workshop on PDEs, in honour of Umberto Mosco, Rome May 28, 2019. (Coorganizers: D.Andreucci,R.Capitanelli, S.Carillo, M.A.Vivaldi)
- ICIAM 2019, minisymposium Fractals in Engineering (coorganizer Anna Rozanova Pierrat), Valencia, July 14-19, 2019

EDITORIAL ACTIVITY

- Editor of the volumes:
Fractal applications in engineering: Theoretical aspects and numerical applications, SEMA SIMAI Springer Series 2021.
Special issue celebrating the Umberto Moscos birthday, Rendiconti di Matematica e Applicazioni 2021.

CONFERENCES, since 09-2000

- M.R.Lancia:"Stokes problems in fractal domains", Functional analytic methods in PDEs, Problemi diretti ed inversi per equazioni d'evoluzione, U.M.I, Pavia, September , 2-7, 2019
- M.R.Lancia:"Stokes flows in irregular domains",ICIAM 2019, minisymposium Fractals in Engineering (coorganizer Anna Rozanova Pierrat), Valencia, July 14-19, 2019
- M.R.Lancia:"Venttsel problems in irregular domains", Functional analytic methods in PDEs, Cesena, June, 25-28, 2019
- M.R.Lancia:"Nonlocal diffusion processes in irregular domains", International Conference on Elliptic and Parabolic Problems, Gaeta, May 20-24, 2019
- M.R.Lancia:" Nonlocal heat transfer across irregular interfaces" , Workshop on Analysis of nonlocal and non smooth models, Bielefeld March 25-29,2019

- M.R.Lancia: "Boundary value problems in irregular domains", MASCOT18, 15th MEETING ON APPLIED SCIENTIFIC COMPUTING AND TOOLS, October 2-5, Rome 2018.
- S. Creo, M.R.Lancia, P. Vernole, "Asymptotics for quasi-linear BVPs with dynamical boundary conditions in fractal domains"
FIFTH WORKSHOP ON THIN STRUCTURES (Naples, September 13-15, 2018)
- M.R.Lancia: "Vector analysis on fractafolds: applications to some BVPs", SIMAI2018, in Complexity Reduction: Mathematical Modelling and Control. July 2-6 ,Rome 2018.
- M.R.Lancia: " Magnetostatic problems in fractal domains, 6th Cornell Conference on Analysis, Probability, and Mathematical Physics on Fractals, Ithaca USA, June 13-17, 2017.
- M.R.Lancia: " Venttsel problems in fractal domains", AIMS 2016, July 2016 Orlando, U.S.A.
- M.R.Lancia: "Regularity results for evolution problems with dynamical boundary conditions in a (pre-)fractal domain", COPDE, Munich 2015.
- M.R.Lancia "Numerical approximation of evolution problems in (pre)fractal domains", Seventh European conference on elliptic and parabolic equations , Gaeta, Italy June 2012
- M.R.Lancia: "Heat flow problems across fractal layers", Conference: New Function spaces in PDEs and Harmonic Analysis, Naples, Italy, May 31-June 4, 2011.
- M.R.Lancia: " An optimal mesh generation for domains with Koch type boundaries", MASCOT11, 11th Meeting on Applied scientific computing and tools, Rome, Italy October 19-21, (2011).
- M.R.Lancia, M.Cefalo, G.Dell'Acqua: " Numerical approximation of some conditioned heat flow problems across fractal layers", SIMAI 2010, Minisimposio Advances and challenges in Biomathematics and Bioinformatics, Cagliari, Italy June 21-25 2010.
- M.R.Lancia: " Irregular heat flow problems", Workshop on Asymptotic analysis and Stochastics methods for heterogeneous media, Alba Julia (Romania) June 9-13, 2010.
- M.R.Lancia: " Heat flow problems in varying Hilbert spaces", 6th European Conference on Elliptic and Parabolic Problems, Minisymposium: Degenerate structures and fractals, Gaeta, May, 25-29, 2009.
- M.R.Lancia: "Numerical approximation of heat flow problems across a Koch-type layer", Mathematical Modelling Mechanics and Materials, Udine 11-13 gennaio 2008.
- M.R.Lancia: "Heat Propagation across fractal layers", Analysis PDEs and Applications, on the occasion of Vladimir Maz'ya's 70th birthday, Roma, June 30 - July 3, 2008.
- M.R.Lancia: " Conditioned semigroups in some heat flow problems across fractal layers", Minisymposium: Differential modeling in applied sciences, SIMAI2008, Roma 15-19 September, 2008.
- M.R.Lancia: " Conduzione del calore attraverso strati frattali", Assemblea scientifica del G.N.F.M. Montecatini Terme, 11-13 ottobre 2007
- M.R.Lancia : "Parabolic transmission problems across irregular layers", International Symposium : Problemi attuali dell'analisi e della fisica matematica, Taormina, Italy June 29-July 1 2006.

- M.R.Lancia:” A constructive approach to some fractal transmission problems”, S.I.A.M. Conf. on Analysis of P.D.E. Minisymposium :fractals, homogeneization and P.D.E., Boston July 10-12 2006.
- M.R.Lancia: ” Convergence results for parabolic transmission problems across irregular layers.”, Workshop on fractal analysis, Eisenach, September 2005,
- ”Energy forms on non self similar fractals”, Fifth European conference on elliptic and parabolic equations in honor of H.Brezis, Gaeta, Italy June 2004
- M.R.Lancia:” Fractal manifolds: results and open problems”, Secondo incontro del Progetto GNAMPA-GNFM : Fisica su varieta’ Frastagliate, Roma,Italy Dept. Me.Mo.Mat. January 2004
- M.R.Lancia:” Variational convergence of singular energy forms associated with second order transmission problems with highly conductive layers” U.M.I. Conference, Milan, Sept. 8-13, 2003,
- M.R.Lancia:”On some second order transmission problems”, Primo incontro del Progetto GNAMPA-GNFM : Fisica su varieta’ Frastagliate, Milano, Politecnico , May 2003,
- M.R.Lancia: ”Variational convergence of singular energy forms related to transmission problems”, International Conference: Fractal Geometry and Stochastics III, Friedrichroda, Marzo, 2003,
- M.R.Lancia ”Problemi variazionali in domini non Euclidei”, Conference” Recenti sviluppi nella teoria delle equazioni differenziali”, Bologna, Italy, April 2002,
- M.R.Lancia ”On the approximation of fractal transmission energies”, SIMAI 2002, Chia Italy June 2002,
- M.R.Lancia: ”A transmission problem with a fractal interface”, SIMAI 2000,Ischia, Italy June 2000
- M.R.Lancia: ”A transmission problem with a fractal layer”, POTENTIAL THEORY AND DIRICHLET FORMS, Varenna Italy September 2000,

Papers

1. M. R. Lancia (in coll. with M.Cefalo, S.Creo, M. Gallo, and P.Vernole) , Approximation of 3D Stokes flows in fractal domains, to appear on SEMA SIMAI Springer Series.
2. M. R. Lancia (in coll. with S.Creo, and P.Vernole),” M-Convergence of p-fractional energies in irregular domains”, to appear on Journal of Convex Analysis, 2021.
3. M.R.Lancia (in coll. with S.Creo, and A. I. Nazarov),” Regularity results for nonlocal evolution Venttsel problems”, To appear on FCAA arXiv: 2004.00515
4. M.R.Lancia (in coll. con S.Creo, and P.Vernole),”Convergence of fractional diffusion processes on extension domains” , J. Evol. Equ. 20 (2020), 109 – 139.
5. M.R.Lancia (in coll. con S.Creo),” Friedrichs inequality in irregular domains”, J. Math. Anal. Appl., 2020, 484, 109-139 DOI: 10.1016/j.jmaa.2019.123665

6. M.R.Lancia (in coll. con S.Creo, M.Hinz, A.Teplyaev and P.Vernole) "Magnetostatic Problems in fractal domains". To appear on the special series Fractals and Dynamics in Mathematics, Science and the Arts published by World Scientific. Volume 5: Analysis, Probability and Mathematical Physics on Fractals, 2020, 477-502. https://doi.org/10.1142/9789811215537_015
7. M.R.Lancia (in coll. con M.Cefalo, S.Creo, and P.Vernole), "Nonlocal Venttsel' diffusion in fractal-type domains: regularity results and numerical approximation". *Math. M. in Appl. Sciences*,14, 4712-4733, 2019
8. M.R.Lancia (in coll. con A. Velez-Santiago and P.Vernole)," A quasi-linear nonlocal Venttsel' problem of Ambrosetti-Prodi type on fractal domains", *DCDS-A*, 39, 4487-4518, 2019.
9. M.R.Lancia (in coll. con P.Vernole) " The Stokes problem in fractal domains: asymptotic behaviour of the solutions", *DCDS-S*, 13,1553-1565, 2020, 10.3934/dcdss.2020088.
10. M.R.Lancia (in coll. con S.Creo, A. Nazarov and P.Vernole),"On two-dimensional nonlocal Venttsel' problems in piecewise smooth domains", *Discrete Cont. Dyn. Syst. Series S*, 12 (1), (2019), 57-64.
11. M.R.Lancia (in coll. con M.Hinz, A.Teplyaev and P.Vernole)"Fractal snowflake domain diffusion with boundary and interior drifts". *JMAA*,**457**, 672-693, (2018).
12. M.R.Lancia (in coll. con S.Creo, A. Velez-Santiago and P.Vernole)," Approximation of a nonlinear fractal energy functional on varying Hilbert spaces". *Commun. Pure Appl. Anal.*, 17 (2018), no. 2, 647669.
13. M.R.Lancia (in coll. con A. Velez-Santiago and P.Vernole),"Quasi-linear Venttsel problems with nonlocal boundary conditions on fractal domains". *Non Linear Analysis Real world applications* , 35,265-291, (2017).
14. M.R.Lancia (in coll. con V. regis Durante, P.Vernole),Asymptotics for Venttsel problems for operators in non divergence form in irregular domains", *Disc. Continuous Dynamical Systems* 9,n.5,1493-1520, (2016)
15. M.R.Lancia (in coll. con V. regis Durante, P.Vernole), Density results for energy spaces on some fractafolds. *Z. Anal. Anwend.* 34, 357372, (2015).
16. M.R.Lancia (in coll con M.Cefalo) An optimal mesh generation algorithm for domains with Koch type boundaries. *Math. Comput. Simulation* 106, 133162, (2014).
17. M.R.Lancia (in coll. con P.Vernole), Venttsel' problems in fractal domains *J. Evol. Equ.* 14, 681712, (2014).
18. M.R.Lancia (in coll. con P.Vernole) "Semilinear Venttsel Problems in Fractal Domains", *Applied Mathematics*, Vol.5 No.12, , DOI: 10.4236/am.2014.512175 , 1820-1833, (2014)
19. M.R.Lancia (in coll. con P.Vernole) Semilinear Evolution Problems with Ventcel-Type Conditions on Fractal Boundaries, *International Journal of Partial Differential Equations* Volume 2014 (2014), Article ID 461046, 13 pages
<http://dx.doi.org/10.1155/2014/461046>
20. M.R.Lancia (in coll con R.Capitanelli e M.A.Vivaldi,),"Insulating layers of fractal type" *Differential and Integral equations.* 26 (2013),1055-1076.

21. M.R.Lancia (in coll con M.Cefalo e H.Liang,),” Heat flow problems across fractal mixtures:regularity results and numerical approximation” *Differential and Integral equations.* 26,(2013), 1027-1054
22. M.R.Lancia (in coll. con P.Vernole) ”Semilinear fractal problems: approximation and regularity results” *Nonlinear Anal.*, 80 (2013), 216–232.
23. M.R.Lancia (in coll. con P.Vernole) ”Semilinear evolution transmission problems across fractal layers” *NonLinear Analysis T.M.A.*, **75**, 4222-4240, (2012)
24. M.R. Lancia (in coll. con G. Dell’Acqua e Massimo Cefalo)” Numerical approximation of transmission problems across Koch-type highly conductive layers. *Applied Math. and Comp.*, **218**, 9, 5453-5473, (2012).
25. M.R.Lancia (in coll. con P.Vernole) ” Irregular heat flow problems.” *SIAM Journal on Mathematical Analysis*, **42**, no.4, 1539–1567, (2010).
26. M.R.Lancia (in coll. con U.Mosco e M.A.Vivaldi),”Homogeneization for conductive thin layers of prefractal type” , *JMAA*,**347**, 354-369, (2008)
27. M.R.Lancia (in coll. con E.Vacca), Numerical approximation of heat flow problems across highly conductive layers”, in corso di stampa su special volume on ”Mathematical modeling of bodies with complicated bulk and boundary behavior” , Quaderni di Matematica, Seconda Universita degli Studi di Napoli, 2008.
28. M.R.Lancia (in coll.con J.Masamune), ”The Liouville property of unbounded fractal layers” *Complex Variables and Elliptic Equations*, **53**, 4: 297-306, 2008.
29. M.R.Lancia (in coll. con U.Freiberg), Energy forms on conformal C^1 diffeomorphic images of the Sierpinski Gasket, *Math. Nachr.* **3**: 337-349,2008
30. M.R. M.R.Lancia (in coll. con P.Vernole), Convergence results for parabolic transmission problems across highly conductive layers with small capacity,*Adv. Math.Sci. Appl.* **16** (2):411-445, 2006.
31. M.R.Lancia, ” Second order transmission problems across a fractal surface” , *Rend. Acc. Naz. dei XL*, Vol. XXVII, 237-251, 2003.
32. M.R.Lancia, ”On some second order trasmission problems” , *Arabian Journal for science and engineering* **29-2C**, 85-100, 2004. Special issue: Wavelet and fractal methods in science and engineering. .
33. M.R.Lancia (in coll. con U.Freiberg),Energy forms on a closed fractal curve, *Zeitschrift für Analysis und ihre Anwendungen*, **23**, 115-137, 2004.
34. M.R.Lancia (in coll. con R.Capitanelli), ”Nonlinear energy forms and Lipschitz spaces on the infinite Koch curve” , *Arabian Journal for science and engineering.* **29-2C**, 101-110,2004. Special issue ”Wavelet and fractal methods in science and engineering” .
35. M.R.Lancia (in coll. con M.A.Vivaldi), ”Asymptotic convergence of transmission energy forms” , *Advances in Mathematical Sciences and Applications* **13**, 1, 315-341, 2003.
36. M.R.Lancia (in coll. con M.A.Vivaldi), ”On the regularity of the solutions for transmission problems” . *Advances in Mathematical Sciences and Applications* **13**, 1, 455-466, 2002.

37. M.R.Lancia, " A Trasmission problem with a fractal interface", *Zeitschrift für Analysis und ihre Anwendungen* **21**, 1, 113-133, 2002.
38. M.R.Lancia (in coll. con R.Capitanelli), "Nonlinear energy forms and Lipschitz spaces on the Koch curve", *Journal of Convex Analysis*. **9**, 2, 245-257, 2002.
39. M.R.Lancia (in coll. con M.A.Vivaldi), " Lipschitz spaces and Besov traces on self-similar fractals", *Rend.Acc. Naz. dei XL*, vol. XXIII, 101-116, 1999.
40. M.R.Lancia (in coll. con M.Chicco), "Generalized maximum principle and evaluation of the first eigenvalue for Heisenberg-type operators", *Boll. Unione Mat. Ital. Sez. B Artic. Ric. Mat.* **8** 4 (2001), no. 2, 441-456.
41. M.R.Lancia (in coll. con M.V.Marchi), "Liouville theorems for Fuchsian-type operators on the Heisenberg Group", *Zeitschrift für Analysis und ihre Anwendungen*, **16** 3, 653-668, 1997.
42. M.R.Lancia (in coll. con M.V.Marchi), "Harnack inequality and Hölder regularity of solutions for Hörmander type operators", *Advances in Mathematical Sciences and Applications***7**, 2, 833-857,1997
43. M.R.Lancia (in coll. con Podio-Guidugli P., Vergara Caffarelli G.), "Gleanings of Radial Cavitation", *Journal of elasticity* , **44** 183-192, 1996.
44. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "Uniqueness of the bounded flow solution in aerodynamics", *Comp.Mech.* **22**, 12-18, 1998.
45. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "A theoretical model for multiply connected wings", *European Journal of Applied Mathematics* , **9**, 6, 607-634, 1998.
46. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "Edge singularity and Kutta condition in 3D aerodynamics",*Meccanica* **34** , 199-229, 1999.
47. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "On the trailing edge singularity and Kutta condition for 3D airfoils",*Eur. Jour. of Mech. B/fluids* **15** , 6, 809-830, 1996.
48. M.R.Lancia (in coll. con Podio-Guidugli P., Vergara Caffarelli G.), "Null Lagrangians in Linear Elasticity ", *Mathematical Models and Methods in Applied Sciences***3** 5, 415-427,1995
49. M.R.Lancia (in coll. Bassanini P.), " Boundary Integral Equations of the First Kind for Planar Vector Fields in Multiply Connected Domains". *Acta Mechanica* **94**, 1-2, 43-57. 1992.
50. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "A Boundary Integral formulation for the Kinetic Field in Aerodynamics. Part II: Applications to 2D Unsteady Flows". *Eur. J. Mech., B/Fluids*, **1**, n. 3 , 1992.
51. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "A Boundary Integral formulation for the Kinetic Field in Aerodynamics. Part I: Mathematical Analysis". *Eur. J. Mech., B/Fluids*, **10** n.4, 1991.
52. M.R.Lancia (in coll. Casciola C.M.), "A Variational Approach for Boundary Integral Equations in Potential Aerodynamics".*Rendiconti di Matematica*, vol. **9**, 1989, 701-717.

Proceedings

1. M.R.Lancia, Parabolic transmission problems across irregular layers, Proc. of the International Symposium : Problemi attuali dell'analisi e della fisica matematica, Taormina 29 giugno-1 luglio 2006, *Le Matematiche* LXII: 271-287, 2007.
2. M.R.Lancia (in coll. con U.Freiberg), Energy forms on non self-similar fractals, Proc. of the fifth European conference on elliptic and parabolic problems: a special tribute to the work of H.Brezis, 2004, Gaeta, Italy, Progress in Nonlinear differential equations and their applications, **63**, 267-277, 2005.
3. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "Edge singularity and Kutta condition for 3D unsteady flows in aerodynamics" in *Integral equations and nonsmooth domains* special volume dedicated to V.G.Maz'ya on his 60th birthday. (W.Wendland Ed.) Proc. IABEM98, Inter. Symp. on Boundary element methods, Ecole Polytechnique Palaiseau, Maggio 1998; Pittman Res. Notes in Math. 1999
4. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "Uniqueness of the bounded flow solution in aerodynamics", Proc. IABEM workshop on *Fundamental solutions in Boundary element methods: formulation and integrations* (L.Benitez ed.) 243-253 giugno 1997, Università di Siviglia;
5. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "On the removal of the trailing edge singularity in 3D flows". *IABEM Symposium on Boundary Integral Methods for Non-linear Problems* (Morino L. & Wendland WL. Eds.) Siena, May 1995 , Kluwer Academic Publishers 1-6, 1997
6. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "Numerical Approximation of Boundary Integral Equations in Three Dimensional Aerodynamics". *Boundary Element Methods Fundamentals and Applications* (S.Kobayashi, N.Nishimura eds.) Proc. IABEM91, Kyoto Ottobre 1991; Springer Verlag 41-48, 1992.
7. M.R.Lancia (in coll. Bassanini P., Casciola C.M., Piva R.), "A General Integral Formulation for Rotational Flows in Aerodynamics". *Boundary Integral Methods Theory and Applications* (L.Morino, R. Piva eds.) Proc. IABEM90, Roma, Ottobre 1990; Springer Verlag 85-94, 1991.
8. M.R.Lancia (in coll. Casciola C.M., Piva R.), "A General Approach to Unsteady Flows in Aerodynamics: Classical Results and Perspectives". *Boundary Element Methods in Engineering* (B.S.Annigeri, K.Tseng eds.) Proc. International Symposium on Boundary Element Methods, Springer Verlag, 58-69. East Hartford, Connecticut, ottobre 1989.