

Publications:

Over 80 total publications and presentations, including over 46 refereed journal articles, 6 books, over 25 papers, refereed and published in conference proceedings, one submitted work, and several works in final stage preparing for publication.

Journal Articles

1. O. Olteanu, *Convexité et prolongement d'opérateurs linéaires*. C. R. Acad. Sci. Paris, **286**(1978), 511-514.
2. O. Olteanu, *Sur les fonctions convexes définies sur les ensembles convexes bornés de R^n* . C. R. Acad. Sci. Paris, **290**(1980), 837-838.
3. O. Olteanu, *Un théorème de prolongement d'un opérateur affine*. Annals of University of Craiova, **8**(1980), 39-41.
4. O. Olteanu, *Une propriété des fonctions convexes d'une variable réelle*. Rev. Roumaine Math. Pures Appl., **27**(1982), 1059-1060.
5. O. Olteanu, *Théorèmes de prolongement d'opérateurs linéaires*. Rev. Roumaine Math. Pures Appl., **28**, 10(1983), 953-983.
6. O. Olteanu, *A partially ordered function space and the reflexivity of Banach spaces*. Rev. Roumaine Math. Pures Appl., **33**, 9(1988), 767-768.
7. O. Olteanu, *Application des théorèmes de prolongement d'opérateurs linéaires au problème des moments et à une généralisation d'un théorème de Mazar-Orlec.* C. R. Acad. Sci. Paris, **313**(1991), 739-742.
8. C. Dumitrescu, O. Olteanu, *The inverse of a convex operator. Newton's method for convex operators*. U.P.B. Sci. Bull., Mechanical Engineering, **53**, 3-4(1991), 23-29.
9. O. Olteanu, *An implicit function theorem for convex not necessary differentiable functions*. U.P.B. Sci. Bull., Electrical Engineering, **53**, 1-2(1991), 19-23.
10. C. Dumitrescu, O. Olteanu, *Applications of the density of polynomials in certain function spaces to the moment problem*. U.P.B. Sci. Bull., Mechanical Engineering, **54**, 1-2(1992), 13-16.
11. O. Olteanu, *A strong separation theorem in normed linear spaces*. Mathematica, Cluj, **35(58)**, 1(1993), 59-63.

12. O. Olteanu, *Uniform approximation of certain continuous functions*. Stud. Cerc. Mat., **46**, 5(1994), 533-541.
13. O. Olteanu, *Applications of a general sandwich theorem for operators to the moment problem*. Rev. Roumaine Math. Pures Appl., **41**, 7-8(1996), 513-521.
14. O. Olteanu, *Two sandwich theorems for linear operators and the moment problem*. Balkan Journal of Geometry and Its Applications, **1**, 2(1996), 75-85.
15. O. Olteanu, *Applications of the solutions of the abstract moment problem to the classical moment problem*. Stud. Cerc. Mat., **49**, 1-2(1997), 93-102.
16. O. Olteanu, *Applications of the Mazar-Orlicz theorem*. Stud. Cerc. Mat., **49**, 5-6(1997), 345-353.
17. M. Niculescu, O. Olteanu, *Applications of two sandwich theorems for linear operators to the moment problem in spaces of analytic functions*. Rev. Roumaine Math. Pures Appl., **44**, 5-6(1999), 807-817.
18. O. Olteanu, *Consequences of a general extension theorem for linear operators and the moment problem*. Mathematical Reports, **3(53)**, 1(2001), 45-52.
19. V. Olariu, O. Olteanu, *Distributions attached to a moment problem and to the calorical derivatives*. U.P.B. Sci. Bull., Series A, **63**, 3(2001), 11-22.
20. O. Olteanu, *Jensen type inequalities related to the Gamma function and a new integral formula*. Rev. Romaine Math. Pures Appl., **46**, 5(2001), 687-703.
21. O. Olteanu, *Extension of linear operators and moment problems in spaces of analytic functions*. Rev. Roumaine Math. Pures Appl., **47**, 5-6(2002), 737-742.
22. L. Lemnete Ninulescu, O. Olteanu, *Applications of the solution of an abstract moment problem to the classical moment problem in the space $C([a,b])$* . Mathematical Reports, **4(54)**, 2(2002), 207-217.
23. O. Olteanu, *Moment problems in sequence spaces*. U.P.B. Sci. Bull., Series A, **64**, 1(2002), 3-12.
24. O. Olteanu, *Some applications of elementary analysis to algebra and arithmetics*. U. P.B. Sci. Bull., Series A, **64**, 2(2002), 9-22.

25. O. Olteanu, Gh. Simion, *A new geometric aspect of the implicit function principle and some applications of the Newton's method for convex operators*. Mathematical Reports, **5(55)**, 1(2003), 61-84.
26. L. Lemnete Ninulescu, O. Olteanu, *Extension of linear operators, distanced convex sets and the moment problem*. Mathematica (Cluj), **46(69)**, 1(2004), 81-88.
27. O. Olteanu, *New aspects of the classical moment problem*. Rev. Roumaine Math. Pures Appl., **49**, 1(2004), 63-77.
28. C. Ambrozie, O. Olteanu, *A sandwich theorem, the moment problem, finite-simplicial sets and some inequalities*. Rev. Roumaine Math. Pures Appl., **49**, 3(2004), 189-210.
29. O. Olteanu, *Applications of a very particular sandwich-type theorem on an unbounded interval*. U.P.B. Sci. Bull., Series A, **64**, 3(2002), 3-12.
30. A. Olteanu, O. Olteanu, *Applications of Newton's method for convex "decreasing" functions and operators*. U.P.B. Sci. Bull. Series A, **66**, 1(2004), 3-12.
31. O. Olteanu, C. Udriște, *Applications of Hahn-Banach principle to moment and optimizations problems*. Nonlinear Funct. Anal. & Appl., **10**, 5(2005), 725-742.
32. J. M. Mihăilă, A. Olteanu, O. Olteanu, *Applications of Newton's method for convex monoton operators*. Math. Reports **7(57)**, 3(2005), 219-231.
33. A. Olteanu, O. Olteanu, *Some exponential-type functional equations solved by a geometrical general method*. U.P.B. Sci. Bull., Series A, **67**, 1(2005), 35-48.
34. L. Lemnete Ninulescu, A. Olteanu, O. Olteanu, *Applications of the solutions of two abstract moment problems to the classical moment problem*. MATHEMATICA, **48(71)**, 2(2006), 173-182.
35. V. Balan, A. Olteanu, O. Olteanu, *On Newton's method for convex operators with some applications*. Rev. Roumaine Math. Pures Appl., **51**, 3(2006), 277-290.
36. A. Olteanu, O. Olteanu, *Solving some special functional equations by a general "geometrical" method, and an approach of the complex case*. Proceedings of the International Conference on Complex Analysis and Related Topics. The Xth Romanian-Finish Seminar (Cluj-Napoca, Romania, August 14-16, 2005). Rev. Roumaine Math. Pures Appl., **51**, 5-6 (2006) 735-745.

37. A. Olteanu, O. Olteanu, *Solving some special functional equations by a general geometrical method*. Annals of University of Craiova **33**(2006), 54-66.
38. J. M. Mihăilă, O. Olteanu, C. Udriște, *Markov-type and operator-valued moment problems, with some applications*. Rev. Roumaine Math Pures Appl., **52**, 4(2007), 405-428.
39. J. M. Mihăilă, O. Olteanu, C. Udriște, *Markov-type moment problems for arbitrary compact and for some non-compact Borel subsets of R^n* . Rev. Roumaine Math Pures Appl., **52**, 5-6(2007), 655-664.
40. O. Olteanu, C. Radu, *Solving some functional and operatorial equations by a general constructive method*. U.P.B. Sci. Bull., Series A, **69**, 4(2007), 57-68.
41. J. M. Mihaila, O. Olteanu, C. Udriște, *La construction de quelque fonction par des moments donnés*. Balkan Journal of Geometry and Its Applications, **13**, 1(2008), 77-86.
42. A. Olteanu, O. Olteanu, *Solving some functional and operatorial equations*. APPLIED SCIENCES, **10** (2008), 93-198.
43. O. Olteanu, C. Radu, *Moment problems on unbounded subsets of R^n , optimization and some applications*. BSGP 16, Geometry Balkan Press, Bucharest, 2009, 114-125 (electronic version).
44. O. Olteanu, *Extremal problems and related Dirichlet problems*. Diff. Geometry-Dynamical Systems 12 (2010), 166-176.
45. O. Olteanu, *Optimal control problems related to kinematics*. BSGP 17, Geometry Balkan Press, Bucharest, 2010, 166-176 (electronic version).
46. O. Olteanu, *Determining the values at equilibrium and the constant rates in interconversion processes* (submitted).
47. I. Sebesan, O. Olteanu, *Systems of differential equations, parabolas and generalizations* (submitted).

Articles published in Gazeta Matematică (Romanian)

48. O. Olteanu, *Some inequalities*. Gaz. Mat., Ser. Publicație Lunară pentru Tineret, 5(1995), 196-198 (Romanian).

49. O. Olteanu, *Studying some functions, with some applications to inequalities*. Gaz. Mat., Ser. Publicație Lunară pentru Tineret, 8(1995), 361-364 (Romanian).
50. O. Olteanu, *Applications of some general theorems of extension of linear operators to the moment problem*. Gaz. Mat., Ser. Inf. Științ. Perfect. Metod., 3(1996), 129-139 (Romanian).
51. O. Olteanu, *A sandwich-type theorem for linear operators*. Gaz. Mat., Ser. Inf. Științ. Perfect. Metod, 4(1996), 197-204 (Romanian).
52. O. Olteanu, *New aspects of the classical moment problem*. Gaz. Mat., Ser. Inf. Științ. Perfect. Metod, 2(1997), 85-92 (Romanian).
53. O. Olteanu, R.G. Maxim, M. Păuna, P. Pocomnicu, *A separation theorem for convex subsets and a direction to applications*. Gaz. Mat., Ser. Publicație Lunară pentru Tineret, 7-8(1997), 257-262 (Romanian).
54. O. Olteanu, *Two integral formulae and some of their consequences*. Gaz. Mat., Ser. Cultură Matematică pentru Tineret, 10(2000), 369-375 (Romanian).

Refereed Conference Publications

55. O. Olteanu, *A moment problem on $L^1(K, d\mu)$. A characterization of the positivity of a sequence on a compact in R^n* . Seminaire d'Espaces Lineaires Ordonnes Topologiques. Editeur: Romulus Cristescu. Nr. 13 (1992), Universite de Bucarest, 1992, 61-62.
56. O. Olteanu, *Applications of some general extension theorems to the moment problem*. Seminaire d'Espaces Lineaires Ordonnes Topologiques. Editeur: Romulus Cristescu. Nr. 15 (1994). Ed. Universitatii din Bucuresti, 1994, 98-99.
57. O. Olteanu, *Two moment problems in a space of Radon measures*. Seminaire d' Espaces Lineaires Ordonnes Topologiques. Nr. 16 (1997), Ed. Universitatii din Bucuresti, 1998, 89-90.
58. O. Olteanu, *A moment problem related to the space $BV([a,b])$* . Seminaire D'espaces Lineaires Ordonnes Topologiques. Nr. 17 (1998). Editeur: Romulus Cristescu. Ed. Universitatii din Bucuresti, 1999, 107-108.
59. C. Ambrozie, O. Olteanu, *A sandwich theorem for functions defined on unbounded finite-simplicial sets, some inequalities and the moment*

problem. Annals of University of Craiova, Math. Comp. Sci. Ser. **32** (2005), 75-82. ([pdf](#)).

60. A. Olteanu, O. Olteanu *Algebraic functional equations solved by a geometrical general method*. Proceedings of The 3rd International Colloquium "Mathematics in Engineering and Numerical Physics", October 7-9, 2004, Bucharest, Romania, Balkan Society of Geometers, Geometry Balkan Press, 2005, pp. 208-217. 59.
61. A. Olteanu, O. Olteanu, *Functional and operatorial equations solved by a general constructive method and some remarks on the complex case*. In "Trends and Challenges in Applied Mathematics", Bucharest, 20-23 June 2007, Conf. Proceedings, Ed. MATRIX ROM, Bucharest, 2007, pp. 275-278).60
62. A. Olteanu, O. Olteanu, *Some unexpected problems of the Moment Problem*. Proc. Of the 6-th Congress of Romanian Mathematicians, Bucharest, 2007, Vol I, Scientific contributions, Romanian Academy Publishing House, Bucharest, 2009, pp. 347-355.

Other Conference Presentations

- 1) O. Olteanu, *Applications of analysis to special PDE's and to functional equations*. Int. Conf. DGDS-2010, Bucharest, August 25-28, 2010.
- 2) O. Olteanu, *Applications of Hahn-Banach principle to scalar and vector optimization*. Int Conf. DGDS -2011, Bucharest, October 6-9, 2011.
- 3) O. Olteanu, *Dirichlet and approximation problems, with applications in technique*. National Symposium of Railway Vehicles, Edition VII, , November 26-27, 2009, Department of Railway Vehicles, University POLITEHNICA of Bucharest, Ed. MATRIX ROM, ISSN 1843-9888, pp. 151-160 (Romanian)

Conferences presentations related to some papers from above

- (I) O. Olteanu, *Some applications of a general extension theorem of linear operators to the moment problem*. The XIII-th Int Conf on Operator Theory, June, Predeal, Romnia, 1990.
- (II) O. Olteanu, *Applications of general extension theorem of linear operators to the moment problem and to Mazur-Orlicz type theorems.*, Topological Ordered Vector Spaces Seminar, No. 11 (1990). University

- of Bucharest, pp. 93-95 (work communicated in the Colloquium of the Seminar).
- (III) O. Olteanu, *An application of a general extension theorem of a linear operator to the classical moment problem*. Topological Ordered Vector Spaces Seminar No. 12 (1991), University of Bucharest, pp. 71-73 (work communicated in the Colloquium of the Seminar).
- (IV) O. Olteanu, *Strong separation theorem in normed linear spaces*. 22-nd Conference on Differential Geometry and Topology, Polytechnic Institute of Bucharest, September 9-13, 1991.
- (V) O. Olteanu, *A moment problem for algebraic compact subsets of R^n* . XIV-eme Colloque Espaces Lineaires Ordonnees Topologiques, Sinaia 23-25 Juin, 1993. Brosura Seminaire d'Espaces Lineaires Ordonnees Topologiques No. 14 (1993). Universite de Bucarest, 85-86.
- (VI) O. Olteanu, *Two sandwich theorems for linear operators and the moment problem*. First Conference of Balkan Society of Geometers. University POLITEHNICA of Bucharest, Bucharest, September 23-27, 1996.
- (VII) O. Olteanu, *Extension of linear operators, distanced convex sets and the moment problem*. 18-th Colloquium Topological Ordered Linear Spaces, Bucharest, September 26-28, 2001. Brosura Topological Ordered Linear Spaces No. 18 (2001). Ed. Universitatii din Bucuresti, pp.89-90.
- (VIII) O. Olteanu, -another version of the talk presented in (VII). The Conference on Spectral Theory of Operators and Applications, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, May 2001, Bucharest..
- (IX) O. Olteanu, *Extension of linear operators and moment problems in spaces of analytic functions*. International Conference on Complex Analysis and Related Topics. The 9-th Romanian-Finnish Seminar, Brasov, August 27-31, 2001.
- (X) O. Olteanu, Gh. Simion, *A new geometric aspect of the implicit function principle and some applications of the Newton's method for convex operators*. 5-th Congress of Romanian Mathematicians, Pitesti, Romania, June 22-28, 2003.
- (XI) C. Ambrozie, O. Olteanu, *A sandwich theorem for functions defined on unbounded finite-simplicial sets, some inequalities and the moment problem*. 7-eme Colloque Franco-Roumaine de Mathematiques Appliquees, Craiova, Roumanie, 30 Aout - 3 Septembre 2004.

Textbooks

- 1) Olariu, O. Olteanu, *Mathematical Analysis*. Ed. SEMNE, Bucharest, 1999 (Romanian).
- 2) M. Niculescu, O. Olteanu, *Differential Calculus. Mathematical Analysis. I*. Ed. PRINTECH, Bucharest, 1999 (Romanian).
- 3) V. Olariu, O. Olteanu, *Trigonometrical functions. Theory and Applications*. Ed. VICTOR, Bucharest, 2001 (Romanian).
- 4) C. Dragușin, O. Olteanu, M. Gavrilă, *Mathematical Analysis. Theory and applications, Vol I*, Ed. MATRIX ROM, Bucharest, 2007 (Romanian).
- 5) C. Dragușin, O. Olteanu, M. Gavrilă, *Mathematical Analysis. Theory and applications. Vol II*, Ed. MATRIX ROM, Bucharest, 2007 (Romanian).
- 6) C. Dragușin, O. Olteanu, M. Gavrilă, *Mathematical Analysis. Theory and applications. Vol III*, Ed. MATRIX ROM, Bucharest, 2010 (Romanian).