# CURRICULUM VITAE

*Name and surname*: Konstantin DYAKONOV

*Date and place of birth*: 30 May 1964; Leningrad, USSR

*Sex*: male

*Nationality*: Spanish

*Current position*: ICREA Research Professor (since 01/10/2006)

*Affiliation*: Institució Catalana de Recerca i Estudis Avançats (ICREA)
and Universitat de Barcelona

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## DEGREES

*Graduated from*: Leningrad State University, 1986

*Ph. D. (in physical and mathematical sciences)*: St. Petersburg State University, 1991

## PREVIOUS LONG-TERM POSITIONS

- Institute of Analysing Devices, Leningrad, USSR; researcher (1986-1989)
- St. Petersburg University of Electrical Engineering, St. Petersburg, Russia; assistant professor (1989-1992) and then associate professor (1992-1998) in the Department of Mathematics
- Universidad de La Laguna, Tenerife, Spain (1996-1997); visiting professor
- Steklov Institute of Mathematics, St. Petersburg Branch (POMI), St. Petersburg, Russia; senior researcher (1998-2007)
- Universitat de Barcelona, Catalonia, Spain (1999-2001); visiting research fellow under the programme “Estancias temporales de jóvenes científicos y tecnólogos”
- Universitat de Barcelona, Catalonia, Spain (2003-2006); Ramón y Cajal researcher

## HONOURS AND DISTINCTIONS

-- A prize from *Academia Europaea* for young scientists from the former Soviet Union, 1998

-- A special “excellence in research” mention for a series of papers in the annual report of the Russian Academy of Sciences, 2000

-- Selected as Number 1 in the area of Mathematics in the Ramón y Cajal programme of MCyT (the Spanish Ministry of Science and Technology), 2002

-- ICREA Conference Award (2011); recipients: Sergey Tikhonov and Konstantin Dyakonov; ICREA Workshop on Approximation Theory and Fourier Analysis, December 12-16, 2011, held at the Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain

-- Certificate of Outstanding Contribution in Reviewing from the Editors of *Journal of Functional Analysis*, in recognition of the contributions made to the quality of the journal (2016)

## PUBLICATIONS

1. K. M. Dyakonov, *On the geometry of the unit ball in the space $K^1_\theta$* (in Russian), in: Geometric Problems in the Theory of Functions and Sets, pp. 52-54, Kalinin Gos. Univ., Kalinin, 1987.

2. K. M. Dyakonov, *On an interpolation problem and on equivalent norms in spaces $K^p_\theta$,* (English transl.) Vestnik Leningrad University Mathematics **21** (1988), No. 4, 59-62.

3. K. M. Dyakonov, *Moduli and arguments of analytic functions from subspaces in $H^p$ that are invariant for the backward shift operator,* (English transl.) Siberian Mathematical Journal **31** (1990), 926-939.

4. K. M. Dyakonov, *Entire functions of exponential type and model subspaces in $H^p$,* (English transl.) Journal of Mathematical Sciences **71** (1994), 2222-2233.

5. K. M. Dyakonov, *Kernels of Toeplitz operators, smooth functions, and Bernstein-type inequalities,* (English transl.) Journal of Mathematical Sciences **78** (1996), 131-141.

6. K. M. Dyakonov, *Interpolating functions of minimal norm, star-invariant subspaces, and kernels of Toeplitz operators,* Proceedings of the American Mathematical Society **116** (1992), 1007-1013.

7. K. M. Dyakonov, *Smooth functions and coinvariant subspaces of the shift operator,* St. Petersburg Mathematical Journal **4** (1993), 933-959.

8. K. M. Dyakonov, *Division and multiplication by inner functions and embedding theorems for star-invariant subspaces,* American Journal of Mathematics **115** (1993), 881-902.

9. K. M. Dyakonov, *Multiplication by Blaschke products and stability of ideals in Lipschitz algebras,* Mathematica Scandinavica **73** (1993), 246-258.

10. K. M. Dyakonov, *Smooth functions in the range of a Hankel operator,* Indiana University Mathematics Journal **43** (1994), 805-838.

11. K. M. Dyakonov, *Moment problems for bounded functions,* Communications in Analysis and Geometry **2** (1994), 533-562.

12. K. M. Dyakonov, *Smooth functions and inner factors,* in: Linear and Complex Analysis Problem Book (V. P. Havin and N. K. Nikolski, eds.), Part I, pp. 457-460, Lecture Notes in Mathematics, vol. **1573**, Springer-Verlag, Berlin and Heidelberg, 1994.

13. K. M. Dyakonov, *An abstract interpolation problem for bounded functions* (in Russian), Izvestiya GETU (=Proceedings of the St. Petersburg University of Electrical Engineering) **472** (1994), 39-43.

14. K. M. Dyakonov, *On the zeros and Fourier transforms of entire functions in the Paley-Wiener space,* Mathematical Proceedings of the Cambridge Philosophical Society **119** (1996), 357-362.

15. K. M. Dyakonov, *Generalized Hardy inequalities and pseudocontinuable functions,* Arkiv för Matematik **34** (1996), 231-244.

16. K. M. Dyakonov, *Factorization of smooth analytic functions via Hilbert-Schmidt operators,* St. Petersburg Mathematical Journal **8** (1997), 543-569.

17. K. M. Dyakonov, *On the moduli of holomorphic functions that are smooth up to the boundary*, in: Classical Analysis, Proceedings of the 8th International Symposium, Kazimierz Dolny, Poland (T. Mazur, ed.), pp. 7-11, Warsaw Agriculture University Press, Warsaw, 1996.

18. K. M. Dyakonov, *The moduli of holomorphic functions in Lipschitz spaces*, Michigan Mathematical Journal **44** (1997), 139-147.

19. K. M. Dyakonov, *Equivalent norms on Lipschitz-type spaces of holomorphic functions,* Acta Mathematica **178** (1997), 143-167.

20. K. M. Dyakonov, *Besov spaces and outer functions*, Michigan Mathematical Journal **45** (1998), 143-157.

21. K. M. Dyakonov, *Embedding theorems for star-invariant subspaces generated by smooth inner functions,* Journal of Functional Analysis **157** (1998), 588-598.

22. K. M. Dyakonov, *Multiplicative structure in weighted BMOA spaces*, Journal d'Analyse Mathématique **75** (1998), 85-104.

23. K. M. Dyakonov, *Approximate identities and geometric means of smooth positive functions*, Journal d'Analyse Mathématique **78** (1999), 307-327.

24. K. M. Dyakonov, *Coefficient inequalities for functions annihilated by a Toeplitz operator,* Complex Variables Theory and Applications **39** (1999), 39-56.

25. K. M. Dyakonov, *Absolute values of BMOA functions*, Revista Matemática Iberoamericana **15** (1999), 451-473.

26. K. M. Dyakonov, *Kernels of Toeplitz operators via Bourgain's factorization theorem*, Journal of Functional Analysis **170** (2000), 93-106.

27. K. M. Dyakonov, *Continuous and compact embeddings between star-invariant subspaces*, in: Complex Analysis, Operators, and Related Topics, pp. 65-76, Operator Theory: Advances and Applications, vol. **113**, Birkhäuser, Basel, 2000.

28. K. M. Dyakonov and D. Girela, *On $Q_p$ spaces and pseudoanalytic extension*, Annales Academiae Scientiarum Fennicae Mathematica **25** (2000), 477-486.

29. K. M. Dyakonov, *Polynomials and entire functions: zeros and geometry of the unit ball,* Mathematical Research Letters **7** (2000), 393-404.

30. K. M. Dyakonov, *Canonical factorization in subalgebras of H^\infty associated with Douglas algebras*, Indiana University Mathematics Journal **49** (2000), 817-836.

31. K. M. Dyakonov, *Weighted Bloch spaces, H^p, and BMOA*, Journal of the London Mathematical Society **65** (2002), 411-417.

32. K. M. Dyakonov, *Zero sets and multiplier theorems for star-invariant subspaces*, Journal d'Analyse Mathématique **86** (2002), 247-269.

33. K. M. Dyakonov, *Differentiation in star-invariant subspaces, I: Boundedness and compactness*, Journal of Functional Analysis **192** (2002), 364-386.

34. K. M. Dyakonov, *Differentiation in star-invariant subspaces, II: Schatten class criteria*, Journal of Functional Analysis **192** (2002), 387-409.

35. K. M. Dyakonov, *Extreme points in spaces of polynomials*, Mathematical Research Letters **10** (2003), 717-728.

36. K. M. Dyakonov, *Holomorphic functions and quasiconformal mappings with smooth moduli*, Advances in Mathematics **187** (2004), 146-172.

37. K. M. Dyakonov, *Strong Hardy—Littlewood theorems for analytic functions and mappings of finite distortion*, Mathematische Zeitschrift **249** (2005), 597-611.

38. K. Dyakonov and D. Khavinson, *Smooth functions in star-invariant subspaces*, Contemporary Mathematics **393** (2006), 59-66.

39. K. M. Dyakonov, *Addendum to "Strong Hardy—Littlewood theorems for analytic functions and mappings of finite distortion"*, Mathematische Zeitschrift **254** (2006), 433-437.

40. K. M. Dyakonov, *Self-improving behaviour of inner functions as multipliers*, Journal of Functional Analysis **240** (2006), 429-444.

41. K. Dyakonov and A. Nicolau, *Free interpolation by nonvanishing analytic functions*, Transactions of the American Mathematical Society **359** (2007), 4449-4465.

42. K. M. Dyakonov, *Two theorems on star-invariant subspaces of BMOA*, Indiana University Mathematics Journal **56** (2007), 643-658.

43. K. M. Dyakonov, *Meromorphic functions and their derivatives: equivalence of norms*, Indiana University Mathematics Journal **57** (2008), 1557-1571.

44. K. M. Dyakonov, *Kolmogorov averages and approximate identities*, Constructive Approximation **30** (2009), 17-31.

45. K. M. Dyakonov, *Toepiltz operators and arguments of analytic functions*, Mathematische Annalen **344** (2009), 353-380.

46. K. M. Dyakonov, *Blaschke products and nonideal ideals in higher order Lipschitz algebras*, St. Petersburg Mathematical Journal **21** (2010), 979-993.

47. K. M. Dyakonov, *An ABC theorem on the disk*, C. R. Math. Acad. Sci. Paris **348** (2010), 1259-1261.

48. A. Baranov and K. Dyakonov, *The Feichtinger conjecture for reproducing kernels in model subspaces*, Journal of Geometric Analysis **21** (2011), 276-287.

49. K. M. Dyakonov, *On the singular factor of a linear combination of holomorphic functions,* C. R. Math. Acad. Sci. Paris **350** (2012), 465-467.

50. K. M. Dyakonov, *Factoring derivatives of functions in the Nevanlinna and Smirnov classes,* Annales Academiae Scientiarum Fennicae, Mathematica **37** (2012), 407-413.

51. K. M. Dyakonov, *ABC-type estimates via Garsia-type norms,* Contemporary Mathematics **561** (2012), 229-237.

52. K. M. Dyakonov, *Zeros of analytic functions, with or without multiplicities,* Mathematische Annalen **352** (2012), 625-641.

53. K. M. Dyakonov, *A reverse Schwarz--Pick inequality,* Computational Methods and Function Theory **13** (2013), 449-457.

54. K. M. Dyakonov, *Wronskians and deep zeros of holomorphic functions,* Journal de Mathématiques Pures et Appliquées **99** (2013), 668-684.

55. K. M. Dyakonov, *A characterization of Möbius transformations,* C. R. Math. Acad. Sci. Paris **352** (2014), 593-595.

56. K. M. Dyakonov, *Two problems on coinvariant subspaces of the shift operator,* Integral Equations and Operator Theory **78** (2014), 151-154.

57. K. M. Dyakonov, *Inner functions and inner factors of their derivatives,* Integral Equations and Operator Theory **82** (2015), no. 2, 151-155.

58. K. M. Dyakonov, *Functions in Bloch-type spaces and their moduli,* Annales Academiae Scientiarum Fennicae, Mathematica **41** (2016), no. 2, 705-712.

59. K. M. Dyakonov, *Smooth analytic functions and model subspaces,* Harmonic analysis, partial differential equations, Banach spaces, and operator theory, Vol. 2, 239-266, Assoc. Women Math. Ser., 5, Springer, Cham, 2017.

60. K. M. Dyakonov, *Factorization and non-factorization theorems for pseudocontinuable functions,* Advances in Mathematics **320** (2017), 630-651.

61. K. M. Dyakonov, *Remembering Victor Petrovich Havin,* 50 years with Hardy spaces, 75-80, Operator Theory Advances and Applications, 261, Birkhäuser/Springer, Cham, 2018.

62. K. M. Dyakonov, *A free interpolation problem for a subspace of $H^\infty$,* Bulletin of the London Mathematical Society **50** (2018), no. 3, 477-486.

63. K. M. Dyakonov, *Interpolating by functions from model subspaces in $H^1$,* Integral Equations and Operator Theory **90** (2018), no. 4, Art. 42, 7 pp.

64. K. M. Dyakonov, *Boundary Gauss--Lucas type theorems on the disk,* Journal d'Analyse Mathématique **138** (2019), no. 2, 717-739.

65. D. Dmitrishin, K. Dyakonov and A. Stokolos, *Univalent polynomials and Koebe's one-quarter theorem,* Analysis and Mathematical Physics **9** (2019), no. 3, 991-1004.

66. K. M. Dyakonov, *An extremal problem for functions annihilated by a Toeplitz operator,* Analysis and Mathematical Physics **9** (2019), no. 3, 1019-1029.

67. K. M. Dyakonov, *Quasi-squares of pseudocontinuable functions*, Journal of Functional Analysis **279** (2020), no. 9, Paper No. 108724, 19 pp.

68. K. M. Dyakonov, *Lacunary polynomials in L^1: geometry of the unit sphere*, Advances in Mathematics **381** (2021), Paper No. 107607, 24 pp.

69. K. M. Dyakonov, *A Rudin-de Leeuw type theorem for functions with spectral gaps*, C. R. Math. Acad. Sci. Paris **359** (2021), 797-803.

70. K. M. Dyakonov, *Nearly outer functions as extreme points in punctured Hardy spaces*, Advances in Mathematics **401** (2022), Paper No. 108330, 22 pp.

71. K. M. Dyakonov, *Interpolation and duality in spaces of pseudocontinuable functions*, Mathematische Zeitschrift **302** (2022), no. 3, 1477-1488.

72. K. M. Dyakonov, *Questions about extreme points*, Integral Equations Operator Theory **95** (2023), no. 2, Paper No. 14, 11 pp.

73. K. M. Dyakonov, *Functions with small and large spectra as (non)extreme points in subspaces of H^\infty*, St. Petersburg Mathematical Journal **34** (2023), no. 3, 453-462.

74. K. M. Dyakonov, *Inner functions as strongly extreme points: stability properties*, Annales Fennici Mathematici **48** (2023), no. 2, 681-690.

75. K. M. Dyakonov, *Extremal problems in BMO and VMO involving the Garsia norm*, Journal of Functional Analysis (in press); see also arXiv:2404.05565

## TRANSLATIONS

1. (from English into Russian) G. Brown, *Essay review of the book "Fourier analysis" by T. W. Körner*, translated by K. M. Dyakonov (with a historical commentary by N. K. Nikolski), Algebra i Analiz (= St. Petersburg Mathematical Journal) **3** (1991), no. 1, 258--264.

2. (from Russian into English) A. G. Poltoratskii, *Boundary behavior of pseudocontinuable functions*, Algebra i Analiz **5** (1993), no. 2, 189--210 (Russian); St. Petersburg Mathematical Journal **5** (1994), no. 2, 389--406 (English), translated by K. M. Dyakonov.

## MEMBERSHIP IN EDITORIAL BOARDS

- Journal of Function Spaces
- Proceedings of the Institute of Applied Mathematics and Mechanics, NAS of Ukraine
- Journal of Complex Analysis (until its closure in 2018)
- Abstract and Applied Analysis (until November 2019)

## PARTICIPATION IN RESEARCH PROJECTS

*Project title:* Canonical factorization of analytic functions that are smooth up to the boundary and invariant subspaces of the backward shift operator

*Funded by:* International Science Foundation (= the Soros Foundation), USA
*Duration:* 01/09/1994 – 31/08/1996
*Principal researcher:* K. M. Dyakonov

*Project title:* Multiplicative structure in spaces and algebras of holomorphic functions
*Funded by:* Russian Ministry of Higher Education
*Duration:* 01/01/1996 – 31/12/1997
*Principal researcher:* K. M. Dyakonov

*Project title:* Spaces of analytic functions and their invariant subspaces
*Funded by:* Russian Foundation for Fundamental Research, Russia
*Duration:* 01/01/1997 – 31/12/1998
*Principal researcher:* S. V. Kislyakov

*Project title:* Linear operators in function theory
*Funded by:* Russian Foundation for Fundamental Research, Russia
*Duration:* 01/01/1999 – 31/12/2001
*Principal researcher:* S. V. Kislyakov

*Project title:* Non-separable bases of multidimensional wavelets
*Funded by:* DURSI, Generalitat de Catalunya
*Duration:* 15/02/2002 – 14/07/2002
*Principal researcher:* Joaquim Bruna

*Project title:* Geometric function theory and mathematical foundations of signal processing
*Funded by:* Dirección General de Investigación Ciencia y Técnica, Spain
*Duration:* 2002 – 2005
*Principal researcher:* Joaquim Bruna

*Project title:* Teoría de funciones y sus conexiones con el análisis de la señal
*Funded by:* Dirección General de Investigación, MEC, Spain
*Duration:* 2005 – 2008
*Principal researcher:* Joaquim Ortega Cerdà

*Project:* Grup de recerca consolidat, 2005-SGR-00611
*Funded by:* DURSI, Generalitat de Catalunya
*Duration:* 2005 – 2008
*Principal researcher:* Joaquín Ortega Aramburu

*Project title:* Diversos aspectos de la teoría de funciones y aplicaciones, MTM2008-05561-C02-01
*Funded by:* Dirección General de Investigación, MICINN, Spain
*Duration:* 2009 – 2011
*Principal researcher:* Joaquim Ortega Cerdà

*Project:* Grup de teoria de funcions de la UAB/UB, 2009-SGR-1303

*Funded by:* AGAUR, Generalitat de Catalunya
*Duration:* 2009 – 2013
*Principal researcher:* Carme Cascante Canut

*Project title:* Variable compleja, teoría de operadores y funciones analíticas gaussianas, MTM2011-27932-C02-01
*Funded by:* Dirección General de Investigación, MICINN, Spain
*Duration:* 2012 – 2014
*Principal researcher:* Joaquim Ortega Cerdà

*Project:* Grup de teoria de funcions de la UAB/UB, 2014-SGR-289
*Funded by:* AGAUR, Generalitat de Catalunya
*Duration:* 2014 – 2016
*Principal researcher:* Carme Cascante Canut

*Project title:* Operadores en análisis complejo y sus aplicaciones al estudio de procesos de puntos aleatorios, MTM2014-51834-P
*Funded by:* Ministerio de Economía y Competitividad, Spain
*Duration:* 2015 – 2018
*Principal researcher:* Joaquim Ortega Cerdà

*Project title:* Red temática "Variable compleja, espacios de funciones y operadores entre ellos", MTM2015-69323-REDT
*Funded by:* Ministerio de Economía y Competitividad, Spain
*Duration:* December 1, 2015 – November 30, 2017
*Principal researcher:* José Ángel Peláez

*Project:* Grup de teoria de funcions de la UAB/UB, 2017-SGR-358
*Funded by:* AGAUR, Generalitat de Catalunya
*Duration:* 2017 – 2020
*Principal researcher:* Carme Cascante Canut

*Project title:* Espacios de funciones holomorfas y procesos de puntos, MTM2017-83499-P
*Funded by:* Ministerio de Economía y Competitividad, Spain
*Duration:* 2018 – 2022
*Principal researcher:* Joaquim Ortega Cerdà

*Project title:* Red temática "Variable compleja, espacios de funciones y operadores entre ellos", MTM2017-90584-REDT
*Funded by:* Ministerio de Economía y Competitividad, Spain
*Duration:* July 1, 2018 – June 30, 2020
*Principal researcher:* José Ángel Peláez

*Project:* Grups de recerca (SGR-Cat 2021), Teoria de Funcions i Equacions en Derivades Parcials, 2021 SGR 00087
*Funded by:* AGAUR, Generalitat de Catalunya
*Duration:* 2022 – 2024
*Principal researcher:* Carme Cascante Canut

*Project title:* Varias variables complejas y distribución óptima de puntos, PID2021-123405NB-I00
*Funded by:* Ministerio de Ciencia e Innovación, Spain
*Duration:* 2022 – 2025
*Principal researcher:* Joaquim Ortega Cerdà

## SELECTED RESEARCH STAYS AND VISITING POSITIONS

-- Institute of Mathematics, University of Aarhus, Aarhus, Denmark (April – July, 1993)

-- Chalmers University of Technology, Göteborg, Sweden (May 1994)

-- Universidad de La Laguna, La Laguna, Tenerife, Spain (academic year 1996-97), visiting professor

-- Technion (Israel Institute of Technology), Haifa, Israel (April 1998)

-- Universidad de Málaga, Málaga, Spain (October – December 1998)

-- Universitat de Barcelona, Barcelona, Spain (academic years 1999-2000 and 2000-2001), under the programme "Estancias temporales de jóvenes científicos y tecnólogos"

-- Université de Provence, Marseille, France (May – July 2001)

-- Universidad de La Rioja, Logroño, Spain (September 2001—February 2002)

-- Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain (February—July 2002)

-- Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain (December 2002 – September 2003), visiting researcher under the PIV programme of Generalitat de Catalunya

-- McGill University (Montreal) and Université Laval (Quebec), Canada (October – November 2003)

-- University of Joensuu, Joensuu, Finland (May—June 2006)

-- Chebyshev Laboratory, St. Petersburg State University, St. Petersburg, Russia (October 2012)

-- Centre for Advanced Study (CAS), Norwegian Academy of Science and Letters, Oslo, Norway, under the programme "Operator Related Function Theory and Time-Frequency Analysis" (January 2013)

-- Euler International Mathematics Institute, St. Petersburg, Russia (August 2018, July—August 2019, also in 2021, 2022, 2023 and 2024)

## SELECTED INVITED TALKS, LECTURES AND COURSES

*Title of the talk:* On the moduli of holomorphic functions that are smooth up to the boundary
*Conference:* VIII International Symposium on Classical Analysis
*Published in:* "Classical Analysis, Proceedings of the 8th International Symposium, Kazimierz Dolny, Poland" (T. Mazur, ed.), pp. 7-11, Warsaw Agriculture Univ. Press, Warsaw, 1996.
*Held at:* Kazimierz Dolny, Poland
*Year:* 1995

*Title of the talk:* Canonical factorization in spaces of smooth analytic functions
*Conference:* The L. I. Hedberg Conference in Mathematical Analysis and Applications
*Held at:* Linköping, Sweden
*Year:* 1996

*Title of the talk:* Equivalent norms on Lipschitz-type spaces of holomorphic functions
*Conference:* Holomorphic Function Spaces
*Held at:* Trondheim, Norway
*Year:* 1996

*Title of the talk:* Absolute values of BMOA functions
*Conference:* Geometric Aspects of Fourier and Functional Analysis
*Held at:* Kiel, Germany
*Year:* 1998

*Title of the talk:* Compactness in Bernstein's inequality
*Conference:* International Workshop on Operator Theory and Applications (IWOTA)
*Held at:* Bordeaux, France
*Year:* 2000

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*Title of the talk:* Extreme points in spaces of polynomials
*Conference:* Espaces de fonctions holomorphes et leurs opérateurs
*Held at:* Marseille, France
*Year:* 2002

*Title of the talk:* Holomorphic functions and quasiconformal mappings with smooth moduli
*Conference:* First Joint Meeting between the RSME and the AMS, special session "Banach Spaces of Analytic Functions"
*Held at:* Sevilla, Spain
*Year:* 2003

*Title of the talk:* Free interpolation by nonvanishing analytic functions (joint work with Artur Nicolau)
*Conference:* Analysis and Operators, European Research Network
*Held at:* Dalfsen, the Netherlands
*Year:* 2004

*Title of the talk:* Garsia-type norms in spaces of analytic functions
*Conference:* Recent Results in Operator Related Function Theory
*Held at:* Dublin, Ireland
*Year:* 2004

*Title of the talk*: Self-improving properties of inner functions as multipliers
*Conference*: Journées d'Analyse Harmonique
*Held at*: Université Bordeaux 1, Bordeaux, France
*Dates*: May 16—17, 2005

*Title of the talk*: Two theorems on star-invariant subspaces
*Conference*: Third International Conference on Complex Analysis and Dynamical Systems
*Held at*: Nahariya, Israel
*Dates*: January 2—6, 2006

*Title of the talk*: Self-improving behaviour of inner functions as multipliers
*Conference*: First Winter School in Complex Analysis and Operator Theory
*Held at*: Antequera (Málaga), Spain
*Dates*: February 5—9, 2006

*Minicourse for graduate students and young researchers*, title: "Smooth analytic functions and their moduli", Summer School, Visitor Program "Analytic function spaces on complex domains and manifolds", University of Joensuu, Finland, May 22--26, 2006.

*Plenary lecture* "On star-invariant subspaces of BMOA", International Conference "Analytic Function Spaces", University of Joensuu, Finland, May 29--June 2, 2006.

*Invited talk* at the International Conference "Spaces of Analytic Functions and Their Operators" ("Espaces de fonctions holomorphes et leurs opérateurs"), CIRM, Marseille, France, June 5--9, 2006.

*Invited section talk* at the First French-Spanish Mathematical Congress, Zaragoza, Spain, July 9--13, 2007.

*Invited talk* at the Workshop "Spectral Theory of Operators and Applications", CIRM, Marseille, France, October 13--17, 2008.

*Invited section talk* at Congreso de la Real Sociedad Matemática Española, sesión especial "Análisis Complejo y Teoría de Operadores", Oviedo, Spain, February 4—7, 2009.

*Invited section talk* at the International Conference "Complex Analysis and Dynamical Systems IV", Nahariya, Israel, May 18—22, 2009.

*Invited talk* at the International Conference "Modern Complex Analysis and Operator Theory and Applications, IV", El Escorial (Madrid), Spain, June 17—21, 2009.

*Invited section talk* at the International Conference on Analysis and Applications, Muscat, Oman, January 24—26, 2010.

*Minicourse for graduate students and young researchers*, title: "Smooth analytic functions", taught at the Chebyshev Laboratory of St. Petersburg State University, St. Petersburg, Russia, October 2012.

*Minicourse for graduate students and young researchers*, title: "Hardy spaces", taught at the CRM, Université de Montréal, Montréal, Canada, August 2013.

*Plenary talk* at the Workshop "Operators on spaces of holomorphic functions", Université Toulouse III - Paul Sabatier, Toulouse, France, November 16-19, 2016.

*Invited session talk* “Factorization and non-factorization theorems for pseudocontinuable functions”, Congreso Bienal de la Real Sociedad Matemática Española, Zaragoza, Spain (January 30 - February 3, 2017).

*Invited talk* “Functions in model subspaces and their canonical factorization”, Workshop "Hilbert spaces of entire functions and their applications", Będlewo, Poland (May 22-26, 2017)

*Invited talk* “A free interpolation problem in a subspace of $H^\infty$”, 26th St. Petersburg Summer Meeting in Mathematical Analysis, St. Petersburg, Russia (June 25-30, 2017)

*Invited talk* “Interpolating by functions from star-invariant subspaces”, International Conference "Complex Analysis and Related Topics 2018", Euler International Mathematical Institute, St. Petersburg, Russia (April 23-27, 2018)

*Plenary talk* “(Locally) inner functions and the canonical factorization of their derivatives”, Workshop "Analysis days in Piedmont", Salmour, Italy (May 7-11, 2018)

*Invited talk* “Univalent polynomials and Koebe's one-quarter theorem”, 27th St. Petersburg Summer Meeting in Mathematical Analysis, St. Petersburg, Russia (August 6-11, 2018)

*Invited talk* “Squares and quasi-squares of pseudocontinuable functions”, Conference "One-Dimensional Complex Analysis and Operator Theory", Euler International Mathematical Institute, St. Petersburg, Russia (May 13-17, 2019)

*Plenary talk* “An extremal problem for functions annihilated by a Toeplitz operator”, Workshop "Reproducing Kernels in Function Spaces and Their Applications", Euler International Mathematical Institute, St. Petersburg, Russia (June 3-7, 2019)

*Graduate courses* taught at the UB, as part of the Master's programme in Advanced Mathematics: “Complex analysis in one and several complex variables” (2015--2016), “Functional analysis and PDE” (2019--2020).

*Plenary talk* "An extremal problem for functions annihilated by a Toeplitz operator" - Workshop "Reproducing Kernels in Function Spaces and Their Applications", Euler International Mathematical Institute, St. Petersburg, Russia (June 3-7, 2019)

*Invited talk* "Squares and quasi-squares of pseudocontinuable functions" - Conference "One-Dimensional Complex Analysis and Operator Theory", Euler International Mathematical Institute, St. Petersburg, Russia (May 13-17, 2019)

*Invited talk* "Lacunary polynomials in L^1: geometry of the unit sphere" - Journées d’Analyse Fonctionnelle, Harmonique et Probabilités, Marseille, France (November 9-13, 2020)

*Invited talk* "Lacunary polynomials in L^1: geometry of the unit sphere" - 29th St. Petersburg Summer Meeting in Mathematical Analysis, St. Petersburg, Russia (September 28 - October 1, 2020)

*Advanced minicourse for young researchers*: "Geometry of the unit ball in various holomorphic spaces", Leonhard Euler International Mathematics Institute at St. Petersburg, Russia (November - December, 2021)

*Invited talk* "Nearly outer functions as extreme points in punctured Hardy spaces" - 13th ISAAC Congress (August 2–6, 2021), Ghent University

*Invited talk* "A Rudin–de Leeuw type theorem for functions with spectral gaps" - Workshop on Analysis, Control, and Operator Theory, Université de Bordeaux, France (July 2021)

*Plenary talk* "Functions with small and large spectra as (non)extreme points in subspaces of $H^\infty$" - 30th St.Petersburg Summer Meeting in Mathematical Analysis, Euler International Mathematics Institute, Russia (July 2021)

*Invited talk* "Lacunary Hardy spaces and their extreme points" - International Conference on Operator Theory (ICOT - 2022), Sousse, Tunisia (December 2022)

*Plenary talk* "Functions with spectral gaps as (non)extreme points" - International Workshop on Operator Theory and its Applications (IWOTA), Kraków, Poland (September 2022)

*Plenary talk* "Functions with spectral gaps as extreme or non-extreme points of the unit ball" - 31st St. Petersburg Summer Meeting in Mathematical Analysis, Euler International Mathematics Institute, Russia (August 2022)

*Plenary talk* "Interpolation and duality in spaces of pseudocontinuable functions" - Operators, Functions, Systems: Classical and Modern (June 12–18, 2022), Będlewo, Poland

*Invited talk* "Inner functions as strongly extreme points: stability properties" - International Conference "Recent Advances in Function Spaces and their Operators", Marrakesh, Morocco (May 2023)

*Plenary talk* "Extreme and strongly extreme points in subspaces of H∞" - TV Conference (conference in honor of Sergei Treil and Alexander Volberg), University of Würzburg, Germany (June 2023)

*Plenary talk* "Inner functions as strongly extreme points: stability phenomena" - COSA 2024, Ibn Tofail University, Kenitra, Morocco (February 2024)

*Plenary talk* "Extremal problems in BMO and VMO involving the Garsia norm" - Conference "Shapes and shades of Analysis: in depth and beyond", Luminy - Marseille, France (April 2024)

*Invited talk* "Extremal problems in BMO and VMO involving the Garsia norm" - Advanced Course on Operator Theory and Complex Analysis (ACOTCA 2024), La Laguna, Tenerife, Spain (June 2024)

*Plenary talk* "Extreme points and extremal problems in BMO and VMO, equipped with the Garsia norm" - 33rd St. Petersburg Summer Meeting in Mathematical Analysis, Euler International Mathematical Institute, Russia (August 2024)

## OTHER TYPES OF PROFESSIONAL ACTIVITY

-- Served as referee (*rapporteur*) and member of the jury for several Ph. D. theses at the University of Bordeaux 1, France, in 2000—2005.

-- Coordinator of the Barcelona Analysis Seminar at UB/UAB in 2010—2012.

-- Coordinator of the Barcelona (UB) Complex Analysis group within the Spanish research network “Variable Compleja, Espacios de Funciones y Operadores entre ellos”, member of the Scientific and Steering Committees of that network (until December 2017).

-- Member of Programme or Scientific Committee:
* Second and Third Winter Schools in Complex Analysis and Operator Theory (Sevilla, February 2008 and Valencia, February 2010);
* Intensive Research Programme in Approximation Theory and Fourier Analysis (CRM, Bellaterra, September 2011 – February 2012), including the ICREA Conference on Approximation Theory and Fourier Analysis (December 2011) supported by an ICREA conference award;
* International conference "Complex Analysis and Its Applications" (Bryansk, Russia, June 16–19, 2015);
* Intensive Research Programme "Constructive Approximation and Harmonic Analysis" (CRM, Bellaterra, March – July 2016);
* Fourth Summer School in Complex Analysis and Operator Theory (Leganés, Universidad Carlos III de Madrid, June 12–15, 2017);
* COSA 2024 - Conference on ordered spaces and their applications (Kenitra, Morocco, February 2024).

-- Master thesis supervised: “Kernels of Hankel and Toeplitz operators” by Jim-Felix Lobsien, Technische Universität Berlin, 2011.

-- Member of the jury for a Ph.D. thesis at UAB (March 12, 2018), for several Master theses at UB (July 16, 2018) and a number of TFG’s at UB (July 2, 2020).

-- Member of Selection Committee for the King Faisal Prize in Mathematics (Riyadh, January 2022).

-- Final degree project (TFG) supervised: "The Invariant Subspace Problem" by Roger Melero Costa, Universitat de Barcelona, defended on 05/02/2024.

-- Served as referee for numerous mathematical journals, such as J. Funct. Anal., Indiana Univ. Math. J., Bull. London Math. Soc., J. London Math. Soc., Math. Proc. Cambridge Phil. Soc., Proc. Amer. Math. Soc., Ark. Mat., J. Operator Theory, Canadian Math. Bull., Collect. Math., Arch. Math., St. Petersburg Math. J., Siberian Math. J., Comput. Methods Funct. Theory, Contemp. Math., Publ. Mat., Rev. Mat. Iberoamericana, Bull. Belgian Math. Soc., J. Analyse Math., Integral Equ. Oper. Theory, Math. Zeit., J. Math. Anal. Appl., Central Eur. J. Math., J. Function Spaces, J. Reine Angew. Math., Proc. London Math. Soc., Michigan Math. J., C.R. Math. Acad. Sci. Paris, Ann. Acad. Sci. Fenn. Math., Studia Math., Anal. Math. Phys., Amer. J. Math., Geom. Funct. Anal., Mediterr. J. Math., Complex Anal. Oper. Theory

-- Teaching: a large number of courses on various mathematical subjects, at both undergraduate and graduate levels (including invited mini-courses at workshops), taught over the years in Russia, Denmark, France, Finland, Canada and Spain.

-- Obtained a positive evaluation in the I3 Programme of MICINN (the Spanish Ministry of Science and Innovation).

-- Member of the St. Petersburg Mathematical Society.

-- Steklov Institute of Mathematics at St. Petersburg, Russia, member of the PDMI Club (as former staff member).