

Raúl E. Curto

Curriculum Vitae (abridged version)

Personal

Address **225H MLH**, *The University of Iowa*, 52242, Iowa City, USA.
Phone **(319)519-3859**.
Email **raul-curto@uiowa.edu**.
Homepage **www.math.uiowa.edu/~rcurto**.

Education

1976–1978 **Ph.D. in Mathematics**, *SUNY at Stony Brook*, New York.
1976–1978 **M.A. in Mathematics**, *SUNY at Stony Brook*, New York.
1971–1975 **Licenciate in Mathematics**, *Universidad Nacional de San Luis (UNSL)*, Argentina.
1971–1975 **Teacher Certification in Secondary Education (Math)**, *UNSL*, Argentina.

Research Interests

Multivariable Operator Theory, Truncated Moment Problems, Unilateral and Bivariate Weighted Shifts, Toeplitz Operators with Matrix-Valued and Operator-Valued Symbols, Bergman Spaces of Analytic Functions over Reinhardt Domains, Matrix Theory

Employment History: Academic and Administrative Positions

The University of Iowa

1987– **Professor**, *Dept. of Mathematics*.
1983–1987 **Associate Professor**, *Dept. of Mathematics*.
1981–1983 **Assistant Professor**, *Dept. of Mathematics*.
2004–2016 **Director of Diversity**, *College of Liberal Arts and Sciences*.
1998–2020 **Executive Associate Dean**, *College of Liberal Arts and Sciences*.
1996–1998 **Associate Dean for Faculty**, *College of Liberal Arts*.
1995–1996 **Associate Chair and Director of Undergraduate Studies**, *Dept. of Math*.
1992–1995 **Departmental Executive Officer (DEO)**, *Dept. of Spanish and Portuguese*.
1990–1995 **Director of Graduate Studies**, *Dept. of Mathematics*.

Other Universities

2022, 15, 14, 06, 00 **Distinguished Visiting Professor**, *Bucknell University*, United States; one-week visits.
2019, 2018 **Distinguished Visitor**, *CEMPI*, Université de Lille, France; two-week visits.
2017 **Simons Foundation Fellow**, *University of Konstanz*, Germany; one-week visit.
2020, 2017 **Visiting Professor**, *University of Konstanz*, Germany; one-week visits.
2000 **Distinguished Visiting Lecture Series**, *Safi*, Morocco; two-week visit.

- 2000 **Distinguished Visiting Lecture Series**, *Sungkyunkwan University*, Korea Republic; one-week visit.
- 2000 **Distinguished Visiting Lecture Series**, *Kyunpook University*, Korea Republic; two-week visit.
- 2006, 1997 **Distinguished Visiting Professor**, *Université de Lille*, France; one-month visit.
- 1992 **Distinguished Visitor Lecture Series**, *Univ. Nacional Autónoma de México*, Mexico City; two-week visit.
- 1991 **Distinguished Visiting Professor**, *Tübingen University*, Germany; one-week visit.
- 1992, 1990 **Distinguished Visitor Lecture Series**, *Univ. de Los Andes*, Mérida, Venezuela; two-week visit.
- 1988 **Distinguished Visiting Lecturer**, *LAMAIN (Winter Math. Lab.)*, Mendoza, Arg.; two-week visit.
- 1985 **Distinguished Visiting Lecture Series**, *Univ. Nac. San Luis*, Argentina; two-month visit.
- 1979–1981 **Instructor of Mathematics**, *Dept. of Mathematics*, University of Kansas.
- 1979 **Visiting Lecturer**, *Dept. of Mathematics*, Indiana University.

Selected Awards

- 2026– **Class of 2026 American Mathematical Society Fellow**, *United States*.
- 2010– **American Association for the Advancement of Science Fellow**, *United States*.
- 2004 **Regents Award for Faculty Excellence**, *Board of Regents*, State of Iowa.
- 2002–2027 **Collegiate Fellow**, *College of Liberal Arts and Sciences*, The University of Iowa.
- 2000 **Office of Affirmative Action Catalyst Award**, *The University of Iowa*.
- 1988–1994 **Ad honorem member**, *CONICET (Argentine Research Council)*.
- 1988–1991 **Faculty Scholar Award**, *The University of Iowa*.
- 1995–2000 **Co-recipient**, *GAANN award to increase minority representation in the Department of Mathematics doctoral program*, U.S. Dept. of Education.
- 1971 **Argentine Olympiad of Mathematics**, *West Regional Champion (perfect score)*.

Research Grants (since 2001)

- 2023–2026 **PI**, *National Science Foundation Grant DMS-2247167*, Multivariable operator theory, \$247,807.
- 2025–2026 **PI**, *National Science Foundation Grant DMS-2514486*, Travel Support for junior mathematicians to attend the International Workshop on Operator Theory and its Applications (IWOTA) 2025, \$15,000.
- 2024–2025 **PI**, *National Science Foundation Grant DMS-2420818*, Travel Support for junior mathematicians to attend the International Workshop on Operator Theory and its Applications (IWOTA) 2024, \$25,600.
- 2020–2024 **PI**, *National Science Foundation Grant DMS-1953940*, Travel Support for junior mathematicians to attend the International Workshop on Operator Theory and its Applications (IWOTA) 2020, \$24,000.

- 2014–2023 **co-PI in 2014–2017 and PI in 2017–2023**, *Alfred P. Sloan Foundation Grant*, toward the establishment of The University of Iowa University Center of Exemplary Mentoring, \$1,132,500.
- 2013–2016 **PI**, *National Science Foundation Grant DMS-1302666*, Multivariable operator theory, \$193,614.
- 2012–2013 **PI**, *National Science Foundation Grant DMS-1240475*, Travel Support for junior mathematicians to attend IWOTA 2012, \$21,600.
- 2009–2012 **PI**, *National Science Foundation Grant DMS-0902270*, Travel Support for junior mathematicians to attend IWOTA 2009 and IWOTA 2010, \$25,000.
- 2008–2011 **PI**, *National Science Foundation Grant DMS-0801168*, Multivariable operator theory, \$152,599.
- 2006–2011 **co-PI**, *National Science Foundation VIGRE Grant DMS-0602242*, \$3,000,000.
- 2005–2007 **co-PI**, *National Science Foundation Collaborative Research Grant DMS-0503990 (joint with University of Central Florida)*, Conference Support for GPOTS 2005 and GPOTS 2006. (Univ. of Iowa amount: \$20,000).
- 2004–2007 **PI**, *National Science Foundation Grant DMS-0400741*, Multivariable operator theory, \$121,443.
- 2004–2005 **PI**, *National Science Foundation Grant DMS-0422952*, Travel Support for junior mathematicians to attend IWOTA 2004, \$8,400.
- 2001–2004 **PI**, *National Science Foundation Grant DMS-0099357*, Multivariable operator theory, \$117,521.
- 1980–2001 **PI**, *National Science Foundation*, standard research grants; seven consecutive grants.

Teaching and Mentoring Activities

- External Sponsor for Dr. Hyun Kwon, Project SAGES (Striving to Achieve Gender Equity in STEM), NSF ADVANCE Grant, University at Albany, December 2021 – present.
- External Researcher and Mentor, Deutsche Forschungsgemeinschaft (DFG) research grant DI 2789/2-1, Dr. Philipp di Dio (PI): Time-dependent Moments, University of Konstanz, Germany, March 1, 2022 – Feb 28, 2027.
- Univ. of Iowa Mathematics Department Minority Student Recruitment and Development Committee (a.k.a. Council for Diversity, Equity and Inclusion): 1994 – present.

Ph.D. Students

- Cole Hengel (has passed the Qualifying Exams); since September 2024
- Edward White (has passed the Qualifying Exams and the Ph.D. Comprehensive Exam); since March 2023
- Sam Holen (has passed the Qualifying Exams and the Ph.D. Comprehensive Exam); since March 2023
- Marc Moore (has passed the Qualifying Exams and the Ph.D. Comprehensive Exam); since August 2023
- Seonguk Yoo, December 2010 (Assistant Professor, Gyeongsang National University)
- Jasang Yoon, July 2003 (Professor, The University of Texas Rio Grande Valley)
- José Giménez, July 2000 (Professor, Universidad de Los Andes, Mérida, Venezuela)
- Razvan Gelca, August 1997 (Professor, Texas Tech University); winner, D.C. Priestersbach Dissertation Award, 1998 (dissertation co-directed with C. Frohman)
- George Ji, December 1996 (Senior Manager, Alcatel-Lucent, Chicago, Illinois)
- Ximena Catepillán, May 1991 (Emerita Professor, Millersville University of Pennsylvania)

- Patricio Olivares, May 1991 (Professor, Instituto Profesional de Santiago and Universidad Católica, Chile)

Supervision of Postdoctoral Work

Hyoung Joon Kim, Seoul National University; Young Min Han, Kyunghee University; Sang Hoon Lee, Sunkyunkwan University; Young Min Han, Sunkyunkwan University; Sang Soo Park, Kyungpook University; Teresa Bermúdez, Universidad de la Laguna; Il Bong Jung, Kyungpook Univ., Korea; Renyi Jian, Guizhou Normal University; Keren Yan, SUNY at Stony Brook; Jingbo Xia, SUNY at Stony Brook (with P. Muhly).

Professional Service

Editorial Boards

J. Math. Anal. Appl. (Division Editor and Associate Editor); *Complex Analysis and Operator Theory*; *Integral Equations Operator Theory*; *Oper. Theory Adv. Appl.*; *Constructive Mathematical Analysis*; *Journal of Function Spaces*; *International Scholarly Research Notices*; *Banach Journal of Mathematical Analysis*; *Filomat*; *Operators and Matrices*.

Conferences and Workshops Organized

- Great Plain Operator Theory Symposium, Iowa City, Iowa; May-June 2026 (with S. Bezuglyi, I. Chifan, D. Drimbe, and P.E.T. Jørgensen).
- International Workshop in Operator Theory and its Applications, Seoul, Korea Republic, 2006 (with W.Y. Lee and I.B. Jung, one-week conference).
- Great Plain Operator Theory Symposium, Iowa City, Iowa; May 2006 (with P.E.T. Jørgensen and P.S. Muhly) and May 1992 (with P.E.T. Jørgensen).
- Co-organizer, NSF/NSERC BIRS Workshop on Joint Spectra and Related Topics in Complex Dynamics and Representation Theory (23w5033), Banff, Canada, May 21-26, 2023 (with R. Grigorchuk, N.-B. Dang and R. Yang).
- Co-organizer, BIRS Workshop on Multivariable Spectral Theory and Representation Theory, Banff, Canada, April 2019 (with Z. Cuckovic and M. Stessin).
- Invited Organizer, Special Session on Moment Problems and Applications, International Workshop on Operator Theory and Applications, Helsinki, Finland, July/August 2023.
- Invited Organizer, Special Session on Truncated and Full Moment Problems, and Applications, International Workshop on Operator Theory and Applications, Krakow, Poland, September 2022.
- Invited Co-Organizer, Special Session on C^* -algebras, Operator Spaces and Operator Theory, Mathematical Congress of the Americas, Guanajuato, Mexico, August 2013.
- Co-organizer, Special Session on Operator Theory and Complex Analysis, Seventh International Joint Meeting of the AMS and SMM, Zacatecas, Mexico, May 2007.
- Co-organizer, Special Session on Complex Analysis and Functional Analysis, Third Joint Meeting of the AMS and SMM, Oaxaca, Mexico, December 1997.
- Co-organizer, Special Session on Moments and Operators, Amer. Math. Soc. Central Sectional Meeting, Iowa City, Iowa, March 1996 (with P.E.T. Jørgensen and P.S. Muhly).
- Co-organizer, Special Session on Operator Theory and Triangular Operator Algebras, 99th Annual Meeting of the Amer. Math. Soc., San Antonio, Texas, January 1993.
- Co-organizer, Special Session on Multivariable Operator Theory, 96th Annual Meeting of the American Mathematical Society, Louisville, January 1990.
- Member, International Organizing Committee of the 1994 M. Cotlar Conference, Caracas, Venezuela, January 1994.
- Iowa-Nebraska Functional Analysis Seminar, since 1994 (with A. Donsig, J. Peters, D. Pitts and Y.-T. Poon): one-day conference, convenes twice a year (April and October).

Other

- Committee on Human Rights of Mathematicians, American Mathematical Society, Feb 1, 2014 – Jan 31, 2017; Feb 1, 2009 - Jan 31, 2012 (Chair during CY 2011).
- Univ. of Iowa Mathematics Department Minority Student Recruitment and Development Committee (a.k.a. Council for Diversity, Equity and Inclusion): 1994 – present.
- NSF Research Grant Proposal Reviewer and Panelist: 2021, 2014, 2008, 2007, 2006, 2004, 2002, 1999, 1997, 1996, 1995, 1994, 1993.
- Research Proposal Reviewer for EPSCoR, NSERC, International Science Foundation, Guggenheim Foundation, FONCyT (Argentina), EPSRC (Northern Ireland), National Science Center (Poland), U.S./Israel Binational Science Foundation, U.S. Armenian Bilateral Grants Program.
- Ph.D. Dissertation Outside Reviewer (multiple instances, across many countries).
- External Reviewer of Mathematics Departments and Graduate Programs, multiple universities across the U.S.

Scientific Talks (since 1979)

- Plenary, Semi-plenary Lectures, or Main Speaker: 59
- Invited Talks: 90
- Colloquium Talks: 59
- (non-UI) Seminar and Contributed Talks: 20

Selected Plenary, Semi-plenary, or Main Speaker Lectures (out of 59)

- Main speaker, Matrices and Operators 2025, University of Regina, Canada, August 2025. (via Zoom)
- Main speaker, Summer Workshop in Operator Theory, Krakow, Poland, July 2025. (via Zoom)
- Plenary speaker, Workshop on Operator Theory and Complex Analysis, Universidade de Aveiro, Portugal, July 2025.
- Main Speaker, Advanced Courses in Operator Theory and Complex Analysis (ACOTCA 2025), Clermont-Ferrand (France), June 2025.
- Main speaker, 9th. Linear Algebra Workshop, Portoroz, Slovenia, June 2025.
- Main speaker, International Days of Mathematics, Statistics and Applications (JIMSA 2025), Rabat, Morocco, May 2025. (via Zoom)
- Plenary speaker, Workshop on Operator Theory and Complex Analysis, Universidade da Madeira, Funchal, Portugal, July 22–26, 2024. (via Zoom)
- Plenary speaker, 2024 International Workshop on Function Theory, Operator Theory and Applications (FOA), Korea Institute for Advanced Studies (KIAS), Seoul, Korea, June 2024.
- Main Speaker, Workshop on Operator Theory and Complex Analysis (WOTCA 2023), Évora, Portugal, July 2023.
- Plenary Speaker, Two-hour Minicourse on Multivariable Spectral Theory, NSF/NSERC BIRS Workshop on Joint Spectra and Related Topics in Complex Dynamics and Representation Theory (23w5033), Banff, Alberta, Canada, May 21-26, 2023.
- Plenary Speaker, Constructive Mathematical Analysis CMA TALKS, Talk 7, “Norm and numerical radius of single operators through tools and techniques from multivariable operator theory,” March 2023 (via Zoom).
- Semi-plenary Speaker, International Workshop on Operator Theory and its Applications, Krakow, Poland, September 2022.
- Plenary Speaker, Operator Theory and Beyond, Jagiellonian University and AGH and Agricultural University of Krakow, Poland, June/July 2022. (via Zoom)
- Main Speaker, Workshop on Operator Theory and Complex Analysis (WOTCA 2022), Faro, Algarve, Portugal, June 2022.
- Plenary Speaker, Special Week on Truncated Toeplitz Operators, Focus Program on Analytic Function Spaces and Their Applications, The Fields Institute for Research in Mathematical

- Sciences, Toronto, Ontario, Canada, October 2021. (via Zoom)
- Semi-plenary Speaker, International Workshop on Operator Theory and its Applications, Lancaster, England, August 2021. (via Zoom)
 - Main Speaker, Workshop on Operator Theory and Complex Analysis (WOTCA 2021), Lisbon, Portugal, June 2021. (via Zoom)
 - Main Speaker, Operator Theory: 2020 Virtual Workshop Seoul Tokyo, December 2020. (via Zoom)
 - Main Speaker, Advanced Courses in Operator Theory and Complex Analysis (ACOTCA 2019), Université Paris Est Marne-la-Vallée (France), Marne-la-Vallée, France, June 2019.
 - Main Speaker, BIRS Workshop on Multivariable Spectral Theory and Representation Theory, Truncated Moment Problems: An Introductory Survey, Banff Research Station, Banff, Alberta, Canada, April 2019.
 - Plenary speaker, Northeastern Analysis Meeting, University at Albany, Albany, New York, October 2017.
 - Plenary speaker, Great Plains Operator Theory Symposium, University of Illinois, Urbana, Illinois, May 2016.
 - Semi-Plenary Speaker, Twenty-sixth International Workshop on Operator Theory and Applications, Tbilisi, Georgia, July 2015.
 - Plenary Speaker, Twenty-fourth International Workshop on Operator Theory and Applications, Bangalore, India, December 2013.
 - Plenary Speaker, Twenty-third International Workshop on Operator Theory and Applications, Sydney, Australia, July 2012.
 - Main speaker, KOTAC International Conference: Operator Theory and Its Applications, Chonbuk University, Cheongju, Korea, June 2012.
 - Plenary Speaker, Twenty-second International Workshop on Operator Theory and Applications, Seville, Spain, July 2011.
 - Semi-plenary speaker, Twenty-first International Workshop on Operator Theory and Applications, Berlin, Germany, July 2010.
 - Plenary Speaker, Recent Advances in Function Related Operator Theory, Rincón, Puerto Rico, March 2010.
 - Plenary Speaker, Twentieth International Workshop on Operator Theory and Applications, Guanajuato, Mexico, September 2009.
 - Plenary speaker, Great Plains Operator Theory Symposium, University of Colorado, Boulder, June 2009.
 - Plenary speaker, KOTAC International Conference: Operator Theory and Its Applications, Taegu City, Korea, June 2009.
 - Keynote Speaker, International Operator Theory Conference, Taegu, Korea, June 2005.
 - Keynote speaker, Belfast Functional Analysis Symposium, November 2003.
 - Plenary speaker, Great Plains Operator Theory Symposium, Charlotte, North Carolina, May 2002.

Publications: Selected Edited Books and Research Monographs (out of 13)

- E. Albrecht, R.E. Curto, M. Hartz and M. Putinar (co-editors), *Multivariable Operator Theory, The Jörg Eschmeier Memorial Volume*, Springer Nature, 2024; vii + 900 pp.
- R.E. Curto, J.W. Helton, H. Lin, X. Tang, R. Yang and G. Yu (co-editors), *Operator Theory, Operator Algebras and Their Interactions with Geometry and Topology, Ronald G. Douglas Memorial Volume*, Proceedings of the International Workshop on Operator Theory and Applications (IWOTA), Shanghai, China, 2018, *Oper. Theory Adv. Appl.* 278 (2020); 534 pp.
- R.E. Curto, I.S. Hwang and W.Y. Lee, Matrix functions of bounded type: An interplay between function theory and operator theory, *Memoirs Amer. Math. Soc.* 260(2019), no. 1253; 110 pp.

- R.E. Curto and M. Mathieu (co-editors), *Elementary Operators And Their Applications: 3rd International Workshop, Queen's University Belfast, April 14-17, 2009*, Oper. Theory Adv. Appl. 212(2011); 153 pp.
- R.E. Curto and W.Y. Lee, Joint hyponormality of Toeplitz pairs, *Memoirs Amer. Math. Soc.* 150, no. 712(2001), x+65 pages. (Featured MR 2002c:47042)
- R.E. Curto and L.A. Fialkow, Flat extensions of positive moment matrices: Recursively generated relations, *Memoirs Amer. Math. Soc.* 136, no. 648(1998), x+56 pp. (Featured MR 99d:47015)
- R.E. Curto and L.A. Fialkow, Solution of the truncated complex moment problem for flat data, *Memoirs Amer. Math. Soc.* 119, no. 568(1996), x+52 pp. (Featured MR 96g:47009)
- R.E. Curto, R.G. Douglas, J.D. Pincus and N. Salinas (co-editors), *Multivariable Operator Theory, Contemporary Math.* 185, Amer. Math. Soc., Providence, 1995.

Publications: Selected Articles in Refereed Journals (out of 160)

(MathSciNet, December 17, 2025: **3,067** citations in **1,254** publications by **890** unique citing authors; the h-index is **28**.)

Block Toeplitz Operators

- M. Abhinand, R.E. Curto, I.S. Hwang, W.Y. Lee and T. Prasad, Subnormal block Toeplitz operators, *J. Anal. Math.* 155(2025), 485–500.
- R.E. Curto, I.S. Hwang, S. Kim and W.Y. Lee, Circle companions of Hardy spaces of the unit disk, *J. Funct. Anal.* 285 (2023), no. 12, Paper No. 110159, 23 pp.
- R.E. Curto, I.S. Hwang and W.Y. Lee, *Recent developments in the interplay between function theory and operator theory for block Toeplitz, Hankel, and model operators*, Function Spaces, Theory and Applications, I. Binder, D. Kinzbulatov and J. Mashreghi, Eds., Springer, 2023; 279-319.
- R.E. Curto, I.S. Hwang and W.Y. Lee, Operator-valued rational functions, *J. Funct. Anal.* 283(2022), no. 9, art. 109640, 23 pp.
- R.E. Curto, I.S. Hwang and W.Y. Lee, The Beurling-Lax-Halmos Theorem for infinite multiplicity, *J. Funct. Anal.* 280(2021), art. 108884; 101 pp.
- R.E. Curto, I.S. Hwang and W.Y. Lee, Hyponormality of bounded-type Toeplitz operators, *Math. Nachr.* 287(2014), 1207-1222.
- R.E. Curto, I.S. Hwang and W.Y. Lee, Hyponormality and subnormality of block Toeplitz operators, *Adv. Math.* 230(2012), 2094-2151.

Multivariable Spectral Theory

- C. Benhida, R.E. Curto, S.H. Lee and J. Yoon, The spectral picture and joint spectral radius of the generalized spherical Aluthge transform, *Adv. Math.* 408(2022), art. 108602, 27 pp.
- R.E. Curto and J. Yoon, Norm and numerical radius of single operators through tools and techniques from multivariable operator theory, *Linear Algebra Appl.* 649(2022), 301-325.
- R.E. Curto, Taylor joint spectrum, *Encyclopaedia of Mathematics*, Supplement III, M. Hazewinkel (ed.), Kluwer Acad. Publ., 2002; pp. 399-401.
- R.E. Curto, Spectral theory of elementary operators, *Proceedings of the Workshop on Elementary Operators and Applications*, M. Mathieu, ed., World Scientific, 1992; pp. 3-52.
- R.E. Curto, Applications of several complex variables to multi-parameter spectral theory, in *Surveys of Recent Results in Operator Theory*, Vol. II, J.B. Conway and B.B. Morrel, editors,

Longman Publishing Co., London, 1988, 25-90.

- R.E. Curto and L.A. Fialkow, The spectral picture of (L_A, R_B) , *J. Funct. Anal.* 71(1987), 371-392.
- R.E. Curto, The spectra of elementary operators, *Indiana Univ. Math. J.* 32(1983), 193-197.
- R.E. Curto, Fredholm and invertible n -tuples of operators. The deformation problem, *Trans. Amer. Math. Soc.* 266(1981), 129-159.

Bivariate Weighted Shifts

- R.E. Curto and J. Yoon, Semi-hyponormality of commuting pairs of Hilbert space operators, *Bull. Sci. Math.* 205(2025), Paper No. 103718, 36 pp.
- R.E. Curto, S.H. Lee and J. Yoon, Solution of the reconstruction-of-the-measure problem for canonically invariant subspaces, *Ann. Mat. Pura Appl.* (1923 -) 201(2022), 1489-1504.
- R.E. Curto, S.H. Lee and J. Yoon, Polynomial embeddings of unilateral weighted shifts into 2-variable weighted shifts, *Integral Equations Operator Theory* 93(2021), art. 64, 1-29.
- R.E. Curto, S.H. Lee and J. Yoon, Quasinormality of powers of commuting pairs of bounded operators, *J. Funct. Anal.* 278(2020), art. 108342; 23 pp.
- R.E. Curto, S.H. Lee and J. Yoon, Subnormality for arbitrary powers of 2-variable weighted shifts whose restrictions to a large invariant subspace are tensor products, *J. Funct. Anal.* 262(2012), 569-583.
- R.E. Curto and J. Yoon, Disintegration-of-measure techniques for commuting multivariable weighted shifts, *Proc. London Math. Soc.* 92 (2006) 381-402.
- R.E. Curto and J. Yoon, Jointly hyponormal pairs of subnormal operators need not be subnormal, *Trans. Amer. Math. Soc.* 358 (2006), 5139-5159.
- R.E. Curto, S.H. Lee, J. Yoon, k -hyponormality of multivariable weighted shifts, *J. Funct. Anal.* 229(2005), 462-480.
- R.E. Curto and S.S. Park, k -hyponormality of powers of weighted shifts via Schur products, *Proc. Amer. Math. Soc.* 131(2003), 2761-2769.

Multiplication Operators on Bergman Spaces over Reinhardt Domains

- R.E. Curto and K. Yan, The spectral picture of Reinhardt measures, *J. Funct. Anal.* 131(1995), 279-301.
- R.E. Curto and F.-H. Vasilescu, Automorphism invariance of the operator-valued Poisson transform, *Acta Scient. Math. (Szeged)* 57(1993), 65-78.
- R.E. Curto and F.-H. Vasilescu, Standard operator models in the polydisc, *Indiana Univ. Math. J.* 42(1993), 791-810.
- R.E. Curto and K. Yan, Spectral theory of Reinhardt measures, *Bulletin Amer. Math. Soc.* 24(1991), 379-385.
- R.E. Curto and P.S. Muhly, C^* -algebras of multiplication operators on Bergman spaces, *J. Funct. Anal.* 64(1985), 315-329.

Truncated Moment Problems

- R.E. Curto, A. Ech-charyfy, H. El Azhar and E.H. Zerouali, The local operator moment problem on R , *Complex Anal. Oper. Theory* 19(2025), no. 2, Paper No. 25, 31 pp.
- R.E. Curto, H. El Azhar, Y. Omari and E.H. Zerouali, The Square Root Problem and subnormal Aluthge transforms of recursively generated weighted shifts, *Integral Equations Operator Theory*

96(2024), art. 33; 17 pp.

- R.E. Curto, M. Ghasemi, M. Infusino and S. Kuhlmann, The truncated moment problem for unital commutative R -algebras, *J. Operator Th.* 90:1(2023), 223-261.
- R.E. Curto and Ph. di Dio, Time-dependent moments from the heat equation and a transport equation, *Int. Math. Res. Not. IMRN* 2023, 17(2023), 14955–14990.
- R.E. Curto and S. Yoo, A moment theoretic estimate for the cardinality of certain algebraic varieties, *New York J. Math.* 28(2022) 357–366.
- R.E. Curto and S. Yoo, Non-extremal sextic moment problems, *J. Funct. Anal.* 269(2015), 758-780.
- R.E. Curto and M. Putinar, Nearly subnormal operators and moment problems, *J. Funct. Anal.* 115(1993), 480-497.
- R.E. Curto and L.A. Fialkow, Truncated K -moment problems in several variables, *J. Operator Theory* 54(2005), 189-226.
- R.E. Curto and S. Yoo, Cubic column relations in truncated moment problems, *J. Funct. Anal.* 266(2014), 1611-1626.
- R.E. Curto and L.A. Fialkow, An analogue of the Riesz-Haviland Theorem for the truncated moment problem, *J. Funct. Anal.* 255(2008), 2709-2731.
- R.E. Curto, L.A. Fialkow and M. Möller, The extremal truncated moment problem, *Integral Equations Operator Theory* 60(2008), 177-200; with Addendum in *Integral Equations Operator Theory* 61(2008), 147-148.
- R.E. Curto and L.A. Fialkow, Recursiveness, positivity, and truncated moment problems, *Houston J. Math.* 17(1991), 603-635.
- R.E. Curto, Joint hyponormality: A bridge between hyponormality and subnormality, *Proc. Symposia Pure Math.* 51(1990), Part II, 69–91. (MR 91k:47049)

Classical Operator Theory

- R.E. Curto and T. Prasad, Classes of operators related to subnormal operators, *Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. RACSAM* (2026), in press.
- C. Benhida, R.E. Curto and G.R. Exner, Signed representing measures (Berger-type charges) in subnormality and related properties of weighted shifts, *Results Math.* (2026)81:17.
- R.E. Curto, A. Ech-charyfy, H. El Azhar and E.H. Zerouali, Propagation phenomena for operator-valued weighted shifts, *Results Math.* (2026)81:16.
- C. Benhida, R.E. Curto and G.R. Exner, Geometrically regular weighted shifts, *Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. RACSAM* 119(2025), no. 2, Paper No. 54, 23 pp.
- R.E. Curto, G. Datt and B.B. Gupta, Commutativity of Hankel and Toeplitz operators on the Hardy space of the n -torus, *Bull. Sci. Math.* 194(2024), art. 103466, 1–27.
- C. Benhida, R.E. Curto and G.R. Exner, MID and subnormal safe quotients for geometrically regular weighted shifts, *J. Math. Anal. Appl.* 538(2024), art. 128443, 1-25.
- R.E. Curto, G. Datt and B.B. Gupta, Slantification of Hankel Operators on the Hardy Space of the n -torus, *Complex Anal. Oper. Theory* 17(2023), art. 48, 1–16.
- C. Benhida, R.E. Curto and G.R. Exner, Moment infinite divisibility of weighted shifts: sequence conditions, *Complex Anal. Oper. Theory* 16(2022), art. 5, 1-23.
- F. Chabbabi, R.E. Curto and M. Mbekhta, The Mean Transform and the Mean Limit of an operator, *Proc. Amer. Math. Soc.* 147(2019), 1119-1133.
- Z. Cuckovic and R.E. Curto, A new necessary condition for the hyponormality of Toeplitz operators on the Bergman space, *J. Operator Th.* 79(2018), 287-300.
- R.E. Curto and G.R. Exner, Berger measure for some transformations of subnormal weighted

shifts, *Integral Equations Operator Theory* 84(2016), 429-450.

- R.E. Curto and C. Hernández G., A joint spectral characterization of primeness for C^* -algebras, *Proc. Amer. Math. Soc.* 125(1997), 3299-3301.
- R.E. Curto, C. Hernández G. and E. de Oteyza, Contractive completions of partial Hankel contractions, *J. Math. Anal. Appl.* 203(1996), 303-332.
- R.E. Curto and M. Mathieu, Spectrally bounded generalized inner derivations, *Proc. Amer. Math. Soc.* 123(1995), 2431-2434.
- R.E. Curto, P.S. Muhly and J. Xia, Random Toeplitz operators, *Proc. Symposia Pure Math.* 51(1990), Part I, 147-169.
- R.E. Curto, Quadratically hyponormal weighted shifts, *Integral Equations Operator Theory* 13(1990), 49-66. (MR 90k:47061)
- R.E. Curto, P.S. Muhly and J. Xia, Toeplitz operators on flows, *J. Funct. Anal.* 93(1990), 391-450.
- R.E. Curto and N. Salinas, Generalized Bergman kernels and the Cowen-Douglas theory, *Amer. J. Math.* 106(1984), 447-488.
- R.E. Curto, P.S. Muhly and J. Xia, Wiener-Hopf operators and generalized analytic functions, *Integral Equations Operator Theory* (special issue on Index Theory and Wiener-Hopf Equations) 8(1985), 650-673.

(This version of R. Curto's abridged CV was last updated on February 13, 2026.)