Box List: **Zhong-Jin Ruan Papers, 1979–2020**
          Liberal Arts and Sciences, Mathematics Department, UIUC
ID: **15/14/44**

1st Accession: (04/1/2021)

Arrangement:
  Series 1: Personal Files and Publications, 1990–ca. 2010
  Series 2: Subject Files, 1979–2020
  Series 3: Grant Applications and Research Proposals, 1988–2020

Complete Finding Aid (Created April 2021):
  https://archon.library.illinois.edu/index.php?p=collections/controlcard&id=11864&q=ruan

Repository:
  University Archives
  University of Illinois at Urbana-Champaign
  http://archives.library.illinois.edu/

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Series 1: Personal Files and Publications, 1990-ca. 2010
Series 1, Personal Files and Publications (1990-ca. 2010), consists of Professor Ruan's CV, followed by publication, and is arranged chronologically
Box 1

1. Curriculum Vitae, ca. 2010
2. "The Structure of Pure Completely Bounded and Completely Positive Multilinear Operators," *Pacific Journal of Mathematics* 143, no. 1, 1990
3. "Complexifications of Real Operator Spaces," *Illinois Journal of Mathematics* 47, no. 4, 2003
4. "A Representation Theorem for Locally Compact Quantum Groups," *International Journal of Mathematics* 20, no. 3, 2009

Series 2: Subject Files, 1979-2020
Series 2, Subject Files (1979-2020), is organized into the following subheadings: Academic Annual Reports and Sabbatical Applications; Conferences, Talks, and Research Notes; Teaching Materials; and Committee Work. In 'Conferences, Talks, and Research Notes' are listed at the end and arranged alphabetically.
Box 1

Academic Annual Reports & Sabbatical Applications

5. Academic Activity File, 1 of 3, 1988-2009
6. Academic Activity File, 2 of 3, 1988-2009
7. Academic Activity File, 3 of 3, 1988-2009
8. Tenure Review Correspondence, 1991
9. Sabbatical Application, 1993
10. Sabbatical for Fall 2001 and 2008/2015, 2000-15
11. Academic Activity Reports and Summaries, 2009-18

Conferences, Talks, and Research Notes

12. Notes on Geometry, 1 of 2, 1979 -89
13. Notes on Geometry, 2 of 2, 1979 -89
14. Topics in Measure Theory, 1 of 4, 1985 -88
15. Topics in Measure Theory, 2 of 4, 1985 -88

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Series 2: Subject Files, 1979 – 2020
Box 1

16. Topics in Measure Theory, 3 of 4, 1985 -88
17. Topics in Measure Theory, 4 of 4, 1985 -88
18. e* - algebra - UCSB Conference, 1986
19. Santa Barbara Conference on Operator Algebras, 1986
20. "On the Matricial Norm Structure of Operator Spaces" – University of California, Berkeley, Talk – Functional Analysis, 1987
21. "On the Matricial Norm Structure of Operator Spaces" – UIUC Talk, 1987
22. Mathematical Notes Relating to Categories, Vectorial spaces, and Banach Algebras, 1987 -88
23. Ruan. Penn. Notes, 1987 -90
24. Invitation to speak at INCREST -Bucharest, Romania, 1988
25. Seminar Talk -Representation of Operator Bimodules -UIUC, 1988
26. UIUC Functional Analysis Seminar Talk –"Injectivity of Operator Spaces and Its Applications", 1988
27. Wabash Seminars and Miniconferences, 1988 -98
28. American Mathematical Society Meeting -Muncie, Indiana, 1989
29. Mathematical Notes Relating to Operator Spaces, 1989
30. Penn State - Operator Algebras Talk, 1989
31. Talk at GPOTS Houston – Grothendieck Approximation Properties for Operator Spaces, 1989
32. Talk at SEAM V – University of Georgia, 1989
33. American Mathematical Society Meeting – University of California, Irvine, 1990
34. Current Topics in Operator Algebras – Mathematical Society of Japan and Nara-ken, 1990
35. Talk on Abstract Operator Spaces and Banach Theory – University of California – Irvine, 1990
36. Talk at TCU – Fort Worth, TX, 1990
37. American Mathematical Society Meeting, 1991
38. GPOTS – Mapping Spaces for Operator Spaces – Texas A&M, 1991
39. Quantum Group Talks, 1991 -92
40. Operator Convolution Algebras Talk – Springfield, MO, 1991 -92
41. Abstracts Characterization of Operator Spaces – St. Andrew's Talk – July 1992, 1992
42. Algebres d'Operateurs – Université d'Orléans, 1992
43. EMS – St. Andrew's Colloquium, 1992
44. GPOTS Talk, Iowa City, 1992
45. International Conference in Modern Analysis – Delhi, India, 1992
46. London Mathematical Society – Durham Symposium, 1992
47. Seminar Talk and Research, 1992
48. Talks in New Delhi, India – December 1992, 1992
49. International Conference in Abstract Analysis, 1992 -96
50. Amenable Discrete Quantum Groups and ACG Talk – Texas, 1993
51. Talk in South Africa – Kruger National Park – April 13 – 23, 1993

Box 2

1. September 1994 – West Coast Operator Algebra Seminar and March 13, 1995 – University of Toronto, 1994 -95

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Series 2: Subject Files, 1979 – 2020
Box 2

2. GPOTS – Cincinnati – May 1995, 1995
3. "Operator Spaces Associated with Quantum Groups" – Fields Institute, 1995
4. 24th Canadian Operator Symposium – Saskatoon, Canada – "Operator Spaces and Their Applications to Harmonic Analysis" Talk, 1996
5. 16th Conference on Operator Theory – July 2nd – July 8th, 1996 – Timisoara, Romania – Operator Spaces and Their Application to KAC Algebras, 1996
6. Conference on Operator Theory – Timisoara, 1 of 2, 1996 -98
7. Conference on Operator Theory – Timisoara, 2 of 2, 1996 -98
8. International Conference on Operator Algebra and Operator Theory – Shanghai, China, 1997
9. 2nd Math Workshop by Chinese Scholars at Rutgers University, 1997
10. AMS 1998 Jan – Baltimore Talk, 1997-98
11. Local Theory of Operator Spaces Including Wabash, Texas A&M, Fields Institute, 1997 -98
12. 26th Canadian Operator Theory and Operator Algebras Symposium – Edmonton, Alberta, 1998
13. AMS Meeting – Austin, Texas, "On Injectivity and Nuclearity for Operator Spaces – Joint Work with E. Effros and N. Ozawa, 1998
14. Effros – Ruan Talk OLp Spaces, 1998
15. Marseille – Operator Space Conference – June 1-5, 1998
16. Operator Space Workshop and AMS Session March 17th – 18th, March 19th – 20th, 1998 -99
17. Sun Institute Midwest Workshop, 1999
18. Urbana Operator Space Workshop, 1999
19. Waterloo Talk, Waterloo, Ontario, Canada – Operator Spaces, a Natural Quantization of Branch Spaces", 1999
20. Talks on Functional Analysis – MATH 400 – Including Lecture Notes and Student Feedback, 1999 – 2002
21. Conference on Operator Spaces – Centre Emile Borel – IHP, Paris, 2000
22. Talk/Notes on Non-commutative Lp Spaces, ca. 2001
23. Wabash Talk – "A Characterization of Unital Operator Algebra" – October 15, ca. 2001
24. China 2002, Including Conferences in Vancouver, Canada; Nankai China; and Chengde, China, 2001 – 2002
25. 10 Lectures on Operator Spaces – Beijing, 2002
26. National Center for Theoretical Sciences Mathematics Division – National Tsing Hua University, Taiwan – Visiting Professorship, 2002
27. Banach Algebras and Their Applications – Edmonton, Alberta, Canada, 2003
28. Talk at Marseille, France – Espaces d'Opeateurs et Applications, 2003
29. March 12 – UCLA Colloquium and March 18 – Seminar "Operator Spaces and Their Applications to Non-commutative Harmonic Analysis, 2004
30. "From Matrices to Operator Theory" – MATH 499 Talk , Notes, and Student Reviews, 2005
31. BIRS Workshop on Operator Spaces and Group Algebras at Banf International Research Station, 2007
32. 08 – 09 AMS Special Math Dept., 2008 – 2009
33. Analysis Seminar, Part 1 – Recent Developments in the Theory of Operator Spaces, n.d.

Box List: **Zhong-Jin Ruan Papers, 1979–2020**
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Series 2: Subject Files, 1979 – 2020
Box 2

34. "Arveson – Wittstock Hahn – Banach Theorem", n.d.
35. Banach Space, Grothendieck Space, and Operator Spaces, n.d.
36. "A characterization of Operator Algebras", n.d.
37. "Completely Bounded Multivariable Multipliers of Fourier Algebras", n.d.
38. "Completely Bounded Multivariable Multipliers of Fourier Algebras" – Talk at Univesity of Georgia, n.d.
39. Completely Isometric Representations, n.d.
40. "Local Theory of Operator Spaces" – Talk, n.d.
41. Local Theory Talk, n.d.
42. Non-commutative Lp Spaces and Their Connections with Operator Algebras – UNC Talk, n.d.
43. "Operator Spaces – Non-commutative Analysis", n.d.
44. "Operator Spaces as Quantized Banach Spaces" – UNC Talk, n.d.
45. "Operator Spaces and Their Applications to Non-commutative Harmonic Analysis" – Talk, n.d.
46. "Quantized Functional Analysis", n.d.
47. Seminar Talk at Copenhagen – Banach space, Grothendieck space, and Operator spaces, n.d.
48. Talk at Upsala, Sweden – Banach Algebra and Operator Algebra, n.d.

Teaching Materials

49. MATH 347 Fundamental Mathematics – Syllabus, 2018
50. MATH 415 – Worksheet, 2020

Committee Work

51. Berndt, Bruce, Correspondence, 1992
52. Illinois Journal of Mathematics, 2002
53. GPOTS Steering Committee, 2003
54. Promotion and Tenure Committee, 2006 – 2007
55. Promotion and Tenure Committee – Correspondence and Minutes (1 of 2), 2008
56. Promotion and Tenure Committee – Correspondence and Minutes (2 of 2), 2008
57. Wabash Seminar and Miniconference – Federal Grant Funding Report, 2015 – 2020

Series 3: Grant Applications and Research Proposals, (1988 – 2020)
Series 3, Grant Applications and Research Proposals (1988-2020), is arranged chronologically.
Box 3

1. NSF 1988 Berkeley – NSF 1989 – 1991 Illinois, 1988 – 1991
2. International Travel Grant Application – AMS/ICM 90 Travel Program, 1989
3. NSF 1989 ~ 1991 At University of Illinois, 1989 – 1991
4. UIUC Centre for Advanced Study Research Proposal and Correspondence, 1989 – 1991
5. NSF Application and Correspondence, 1991 – 1993
6. NSF Application, Correspondence, and Reports, 1993 – 1996

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Series 3: Grant Applications and Research Proposals, (1988 – 2020)
Box 3

7. NSF Proposal, Award, and Final Report, 1995
8. NSF Proposal and Reports, 1996 – 1999
9. NSF Proposal – International Conference on Operator Algebras an Operator Theory in Shanghai, China, 1997
10. NSF Proposal, Correspondence, and Final Report, 1997 – 2003
11. Apply Center for Advanced Study, October 8, 1998
12. Application to the National Natural Science Foundation of China, 1999
13. Belgium Grant, 2000

Box 4

1. NSF Application and Reports, 2002 – 2005
2. Possible Focused Resea2rch Group – Notes for 5 – Year Proposal, ca. 2004
3. NSF Application and Reports, 2005 – 2009
4. NSF Proposal and Award, 2008 – 2009
5. NSF Proposal, 2011 – 2012
6. NSF Application, 2012
7. UIUC Proposal for Grant Funding – " Capacities in Quantum Information Theory", 2012

Processing Note for the 1st Accession: Duplicates, student exams, secondary materials, and blank manila envelopes were weeded from the collection. Folders titled by the archivist are indicated in brackets ([ ]). Processed by Elizabeth Nosari (April 2021) under the supervision of Susanne Belovari.

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2nd Accession: (8/23/2021)

Series 1: Files and Publications, 1990 - 2012
Series 1, Files and Publications (1990 - 2012) consists of correspondence, a pin from Nankai University, photographs, and publications. Professor Ruan's publications reflect his research interests in operator spaces, quantum groups, and Banach Algebra. Series 1 is arranged alphabetically.
Box 5

1. A characterization of nonunital operator algebras. Ruan. Proceedings of the American Mathematical Society, Vol. 121, No. 1. 1994
2. A Hilbert module approach to the Haagerup Property. Dong and Ruan. Integral Equations and Operator Theory 73. 2012
3. A New Approach to operator spaces. Effros and Ruan. The Canadian Mathematical Society Bulletin, Vol. 34(3). 1991
4. Arens irregularity of the trace class convolution algebra. Hu, Neufang, and Ruan. 2000 Mathematics Society. 2011
5. A representation theorem for locally compact quantum groups. Junge, Neufang, and Ruan. International Journal of Mathematics, Vol. 20, No. 3. 2009
6. COLp Spaces – the local structure of non-commutative Lp spaces. Junge, Nielson, Ruan, and Xu. Advances in Mathematics 187. 2004

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Series 1: Files and Publications, 1990 - 2012
Box 5

7. Convolution of trace class operators over locally compact quantum groups. Hu, Neufang, and Ruan. 2000 mathematics Classification. 2011
8. Complexification of real operator spaces. Ruan. Illinois Journal of Mathematics, Vol. 47, No. 4. 2003
9. Completely bounded multipliers over locally compact quantum groups. Hu, Neufang, and Ruan. London Mathematical Society. 2010
10. Correspondence between Ruan and Masamichi Hamana, 1987
11. Decomposable maps on non-commutative Lp-spaces. Junge and Ruan. Contemporary Mathematics, Vol. 365. 2004
12. Hua Lao-Keng/May 2011
13. Local properties of Ternary rings of operators and their linking C-algebras. Kaur and Ruan. Journal of Functional Analysis 195. 2002
14. Module homomorphisms on duals of banach algebras and some topological centre problems. Hu, Neufang, and Ruan. Mathematics subject Classifications. 2010
15. Module maps over locally compact quantum groups. Hu, Neufang, and Ruan. Studia Mathematica 211 (2). 2012
16. Multivariable multipliers for groups and their operator algebras. Effros and Ruan. Proceedings of Symposia in Pure mathematics, Vol. 51, part 1. 1990.
17. Nankai University Pin
18. On injectivity and nuclearity for operator spaces. Effros, Ozawa, and Ruan. Duke Mathematica Journal, Vol. 110, No. 3. 2001
19. On p-approximation properties for p-opertor spaces. An, Lee, and Ruan. Journal of functional Analysis 259. 2010
20. On real operator spaces. Ruan. Acta mathematica Sinica, English Series, Vol. 19, No. 3. 2003
21. On the analogues of integral mappings and local reflezity for operator spaces. Effros and Ruan. Indiana University Mathematics Journal, Vol. 46, No. 4. 1997
22. On the preduals of dual algebras and their tensor products. Ruan. Contemporary Mathematics, Vol. 120. 1991
23. On topological centre problems and sin-quantum groups. Hu, Neufang, and Ruan. 2000 Mathematics Subject Pass.
24. Photographs from conferences in China and Taiwan, 2012 – 2018
25. Poisson boundaries over locally compact quantum groups. Kalantar, Neufang, and Ruan. International Journal of Maths. 2010
26. Quantum channels. Kuar and Ruan. 2000 Mathematics Subject Classification. 2010 – 2011
27. RIGID OLp structures of non-commutative Lp spaces associated with hyperfinite Von Neuman algebras. Junge, Ruan, and Xu. Mathematica Scandanavica 96. 2005
28. The Structure of pure completely bounded and completely positive multilinear operators. Zhong-Jin Ruan. Pacific Journal of Mathematics, Vol. 143, No. 1. 1990
29. Uniformly complete quotient space UCQ(G) and completely isometric representations of UCQ(G) on B(L2(G)). Popa and Ruan. American Mathematical Society, Vol. 134, No. 4. 2005
30. Weak exactness for dual operator spaces. Dong and Ruan. Journal of Functional Analysis 253. 2007

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Series 2: Subject Files, ca. 1980 - 2018

Series 2, Subject Files (ca. 1980 - 2018) consists of conference notes, recommendation letters, teaching materials, and notes from lectures, presentations, and talks. Series 2 is arranged alphabetically.

Box 5

31. Banach Algebras Conference. 14 – 24th July 2009. Stefan banach mathematical Center. Bedlewo, Poland
32. Canadian abstract harmonic analysis symposium (CAHAS). 2009
33. Chair search, 2011
34. Christmas school on operator spaces, noncommunicative probability and quantum groups at metabelief. Lecture slides. 2014
35. Cooperative research with Z. Dong. 2009
36. Corrected proofs for "The Grothendieck-Petsch and Dvoretzkey theorem for operator spaces. 1994
37. Dong Zhu. 2006
38. Gui Mei An. 2007
39. Johan Kustermans. 1997
40. L.S. Wu papers and letter to Professor Ruan. 1994
41. "Multivariable multipliers for groups and their operator algebras publication information. 1988 – 1990
42. On real operator algebras and real operator spaces notes, undated
43. Recommendation letters from the 1980s
44. Recommendation letters from 1990 – 1995
45. Recommendation letters from 1996 – 1999
46. Recommendation letters from 2000 – 2003
47. Recommendation letters from 2004 – 2009
48. Recommendation letters from 2010 – 2018
49. Recommendation letters, 1 of 3, undated
50. Recommendation letters, 2 of 3, undated
51. Recommendation letters, 3 of 3, undated
52. Ruan talks and presentations on operator spaces. 2004
53. Special week on operator algebras. Research center for operator algebras, East China Normal University, Shanghai, China. 2016
54. Thesis examiner records for "Projective norms on tensor products of operator spaces" by Ms. Vandarva. 2014
55. The 6th international conference on abstract harmonic analysis. June 21st – 25th, 2011
56. WABASH extramural modern analysis miniconference. 2001
57. Workshop operator algebraic aspects of quantum groups. Leuven. November 10th – 12th, 2008
58. Wall of Fame nominations. 2013
59. Zhong-Jin Ruan's Course Abstracts, 1989 – 1997
60. Zhong-Jin Ruan's promotion to associate professor, 1 of 2, 1992
61. Zhon-Jin Ruan's promotion to associate professor, 2 of 2, 1992
62. Zhong-Jin Ruan's "Teaching Philosophy", Fall 1996
63. Zhong-Jin Ruan. University of Illinois – UC lecture notes. 2015

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Series 3: Grant Applications and Research Proposals, 1993 - 2005

Series 3, Grant Applications and Research Proposals (1993 - 2005) consists of applications for NSF (National Science Foundation) grants and a UIUC research board application, and is arranged chronologically.

Box 5

64. NSF (National Science Foundation) Grant Application. 1993 – 1996
65. NSF (National Science Foundation) DMS-9600077 Progress Report. 1996 – 1998
66. NSF (National Science Foundation) redistribution report. 1996 – 1999
67. UIUC research board application form for a grant. 2004 – 2005

Processing Note for the 2nd Accession:

Duplicates and recommendation letters for students were weeded from the collection. Folders titled by the archivist are indicated in brackets ([ ]). Processed by Vinny Bartholomew (October 2021) under the Supervision of Susanne Belovari.