Liberal Arts and Sciences, Mathematics Department, UIUC

ID: 15/14/44

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/

Series 1: Personal Files and Publications, 1990-ca. 2010

Series 1 includes Professor Ruan's CV, followed by journal publications, 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 contains Professor Ruan's Academic Annual Reports & Sabbatical Applications; Conferences, Talks, and Research Notes; Teaching Materials; and Committee Work. All are arranged chronologically within these categories. In Conferences, Talks, and Research Notes, undated files are placed at the end and arranged alphabetically.

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
- 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

Liberal Arts and Sciences, Mathematics Department, UIUC

ID: 15/14/44

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
- 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

ID: 15/14/44

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.
- 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 University of Georgia, n.d.

Liberal Arts and Sciences, Mathematics Department, UIUC

ID: 15/14/44

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

Box 3

Series 3: Grant Applications and Research Proposals

Series 3 contains Professor Ruan's grant applications and research proposals from 1988 - . The series is arranged chronologically.

- 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
- 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

Liberal Arts and Sciences, Mathematics Department, UIUC

ID: 15/14/44

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: 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.