CURRICULUM VITAE
Dr. Arkady K. Kitover
Associate Professor of Mathematics
Department of Mathematics
Community College of Philadelphia
1700 Spring Garden Street
Philadelphia, PA 19130-3991
phones: (215) 751 8723 (office), (215) 637-3555 (home),(267) 872 7033 (cell)
email: akitover@ccp.edu, akitover@hotmail.com

PERSONAL DATA

Place of Birth: Leningrad, USSR

Citizenship: USA

EDUCATION

Ph.D. Mathematics, Leningrad State University, USSR, 1974

M.S. Mathematics, Leningrad State University, USSR, 1969

Diploma with honors (Magna Cum Laude)

DISSERTATION

"*Spectral Analysis of Isometric Operators in Spaces C and L_p.*"

The dissertation contains new results on the spectral properties of isometric weighted composition operators on the classical Banach spaces $C(K)$ and L_p. The most interesting fact discovered in the dissertation establishes a connection between the spectral properties of such operators and the sets of uniqueness for trigonometric series.

ACADEMIC APPOINTMENTS

August 1991-present, Community College of Philadelphia, Associate Professor

September 1998 - Present, Rider University, Adjunct Assistant Professor

Fall 1990, Menlo College, Atherton, California, instructor

July-August 1990, University of California, Berkeley, Summer visiting position

1975-1988, Leningrad Institute of Refrigeration Industry, Assistant Professor

1969-1972, Leningrad State University, Graduate Teaching Assistant.

LECTURES

More than 40 lectures on various aspects of Operator Theory at the following institutions:

former USSR: Leningrad State University, Leningrad Steklov Institute of Mathematics, Moscow State University, Kharkov State University, Odessa State University, South Research Center of Ukrainian Academy of Science, Novgorod State University,

Austria: University of Vienna, University of Linz, 1990

Italy: International conference on Real Analysis and Measure Theory, Naples, 1994

Poland : University of Poznan, International conference on Function Spaces, Poznan, 1998

Greece : University of Rodos, Conference on applications of Functional Analysis to Economics, 1999

Holland : Catholic University of Nijmegen, 2001.

China : Beijing, Mathematical Congress, 2002

Greece : University of Rodos, Conference on applications of Functional Analysis to Economics, 2004

Spain : University of Madrid, 2004

Holland : University of Delft, 2004

Canada : University of Alberta, 2005

United Kingdom : Queen's University of Belfast, 2007.

USA: University of California, Berkeley, Indiana University-Purdue University at Indianapolis, A&M University at Texas, University of Massachusetts (Boston campus), University of New Hampshire, Stanford University, West Chester University, SUNY at Stony Brook, Washington State University, Staten Island College, CUNY, University of Mississippi.

COURSES TAUGHT

USA: Elementary Algebra, Intermediate algebra, Finite mathematics, Linear mathematics (introduction to matrices and simplex method), Geometry for elementary school teachers, Introduction to probability and statistics, Precalculus I (polynomials and rational functions), Precalculus II (exponential, logarithmic, and trigonometric functions), Business Calculus, Statistics for Science, Calculus I (differentiation and its applications), Calculus II (integration and its applications), Calculus III (several variables), Linear algebra, Discrete mathematics, Elementary differential equations.

USSR: Calculus of one and several variables, Introduction to differential equations, Elements of theory of functions of complex variable, Linear algebra.

PUBLICATIONS

Books and Monographs

Banach $C(K)$-modules and operators preserving disjointness (with Y. Abramovich and E. Arenson), Pitman Research Notes in Mathematical Series #277, Longman Scientific & Technical, 1992.

Inverses of Disjointness Preserving Operators (with Y. Abramovich), Memoirs of the Amer. Math. Soc. No.679, 2000.

Inverses and regularity of disjointness preserving operators (with Y. Abramovich), Dissertationes Mathematicae, 433, Warszawa, 2005.

Articles

Articles can be divided into three groups. The first group includes publications on operator theory. The second group includes papers devoted to the problem of optimal level of standardization. Some results in this group are obtained by using Pontrjagin's principle of maximum. The last, third group contains articles considering the problem of finding the optimal number of controls for measurement equipment. In some cases the problem can be solved by using the methods of the discrete numerical optimization.

Articles on operator theory

1. Isometric operators in **C** and uniqueness sets, *Funkcional. Anal. i Prilozen.* **4** (1970), 92–93. English translation: *Functional. Anal. Appl.* **4** (1970), 83-85. MR 42: 875.

2. The spectral properties of unitary operators in **C**, *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov (LOMI)* **22** (1971), 47–64. MR 44: 7335.

3. Commutant theorems for operators that are close to isometries of the space **C**, *Funct. Anal. i Prilozen.* **7** (1973), 87–88. MR 47: 4041.

4. Spectral analysis of isometric operators in spaces **C** and L_p. The Ph.D. Dissertation. Leningrad, 1974.

5. The spectrum of operators that are nearly automorphisms of the Banach algebras, *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **39** (1974), 186–188.

6. The spectrum of operators in ideal spaces, *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov (LOMI)* **65** (1976), 196–198. MR 58 #7190.

7. Spectral properties of unitary and nearly unitary operators in spaces C and L_p, *Izv. Vyss. Ucebn. Zaved. Matematika* 1977, no. 5 (180), 57–65. English translation: *Soviet Math. (Iz.VUZ)* **21** (1977), no. 5, 49–55.

8. Spectral properties of automorphisms with weight in uniform algebras, *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **92** (1979), 288–293.

9. The spectrum of automorphisms with weight, and the Kamowitz-Scheinberg theorem, *Funkcional. Anal. i Prilozen.* **13** (1979), 70–71. English translation: *Functional Anal. Appl.* **13** (1979), 58–58.

10. Disjoint operators in Banach lattices, *Dokl. Akad. Nauk SSSR* **250** (1980), 800–803. English translation: *Soviet Math. Dokl.* **21** (1980), 207–210. MR 81d: 47028.

11. Spectral properties of homomorphisms with weight in algebras of continuous functions and their applications, *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov (LOMI)* **107** (1982), 89–103.

12. Operators in **C** that are induced by smooth mappings, *Funkcional Anal. i Prilozen.* **16** (1982), 61–62. English translation: *Functional Anal. Appl.* **16** (1982), 206–208. MR 84a: 47036.

13. Operators of substitution with a weight in Banach modules over uniform algebras, *Dokl. Aklad. Nauk SSSR,* **271** (1983), 528–531. English translation: *Soviet Math. Dokl.* **28** (1983), 110–113.

14. Spectral properties of endomorphisms with a weight in the commutative Banach algebras, *Teor. Funktsii, Funktsional Anal. i Prilozhen.* no. 41 (1984), 70–77. MR 86k: 46082.

15. Weighted composition operators in spaces of analytic functions, *Zap. Nauch. Sem. Leningrad. Otdel. Inst. Steklov (LOMI)* **141** (1985), 154–161.

16. On mappings of the extremally disconnected compact spaces and on disjointness preserving operators, *Optimization* **40** (1987), 130–140.

17. Operators on Banach $C(K)$- modules and their spectral properties (with Y. A. Abramovich and E. L. Arenson), *Dokl. Akad. Nauk SSSR* **301** (1988), 525–128. English translation: *Soviet Math. Dokl.* **38** (1989), 93–97.

18. The spectrum of an endomorphism in a commutative Banach algebra (with E.A. Gorin), *Lecture Notes in Math.* **1043**.

19. Operators with disjoint powers on Banach lattices and Banach $C(K)$-modules (with E. L. Arenson), XIY *shkola po teorii operatorov v funkcionalnich prostranstvach*, Tezisi dokladov, Novgorod (1989), 16.

20. Operators that are close to rotations and their spectral properties, *Funkcional. Anal. i Prilozen.* **1** (1990), English translation: *Funkcional Anal. Appl.* **1** (1990).

21. Compact disjointness preserving operators (with E. L. Arenson), *Funkcional Anal. i Prilozen.* **26** (1992), 55–57. English translation: *Funkcional Anal. Appl.* **26** (1992), 119–121.

22. The spectrum of the weighted composition operators in spaces of vector-valued functions. *Atti Sem. Mat. Fis. Univ. Modena,* **XLIV** (1996), 441–446.

23. Almost homeomorphic mappings of compact spaces (with L. Friedler), *Topology and its Applications* **77** (1997), 1–14.

24. A solution to a problem on invertible disjointness preserving operators (with Y. Abramovich), *Proc. Amer. Math.Soc.,* **126** (1998), 1501-1505.

25. d-independence and d-bases in vector lattices (with Y. Abramovich), *Review Roumaine Math. Pures Appl.* **44** (1999).

26. A characterization of operators preserving disjointness in termes of their inverse (with Y. Abramovich), *Positivity,* **4** (2000).

27. New advances regarding the inverses of disjointness preserving operators, I, (with Y. Abramovich), *Proceedings of the conference "Function Spaces* V" , Lecture Notes in Pure and Applied Mathematics, vol. **213**, Marcel Dekker, New York, 2000, pp. 47 -70.

28. A characterization of operators preserving disjointness in terms of their inverse (with Y. Abramovich), *Positivity* **4** (2000), 205-212.

29. Inverses and regularirty of band preserving operators (with Y. Abramovich), *Indag. Math.*, **13(2)** (2002), 143-167.

30. d-independence and d-bases (with Y. Abramovich), *Positivity*, **7** (2003), pp. 95-97.

31. The Banach lattice $C[0,1]$ is super d-rigid (with Y. Abramovich), *Studia Mathematica*, **159(3)** (2003), pp. 337- 355.

32. Operator norm limits of order continuous operators (with A.W. Wickstead), *Positivity*, **9** (2005), 341-355.

33. A generalized Jentzsch theorem, *Positivity*, **9** (2005), pp. 501-509.

34. Positive operators without invariant sublattices (with A.W. Wickstead) , *Proceedings of the conference "Positivity IV - Theory and Applications"*, Technische universitat Dresden (2005), pp. 73-78.

35. Invariant sublattices of positive operators (with A.W. Wickstead), *Indag. Math. ,* **18(1)** (2007), pp. 39 - 60.

Articles on optimal level of standardization

1. Macroeconomic resource models of standardization (with B. D. Malii and Y. S. Titkov), *Questions of Shipbuilding. Standardization and Metrology* , vol. 13, 1977.

2. Investigation of some resource macroeconomic models of standardization (with B. D. Malii and Y. S. Titkov), *Questions of Shipbuilding. Standardization and Metrology*, vol. 15, 1978.

3. Properties of optimal index of level of standardization (with B. D. Malii), *Shipbuilding*, Leningrad 1978.

Articles on optimal controls for measurement equipment

1. Models and methods of optimization of intervals between controls (with A. R. Stires), Leningrad. The Central Research Institute "Rumb" 1981.

2. Optimization of intervals between controls (with A. R. Stires), *Questions of Shipbuilding. Standardization and Metrology* 26, 1983.

3. Some models of specialization of metrological services (with V. V. Popov and A. R. Stires), *Questions of Shipbuilding. Standardization and Metrology* 27, 1984.

4. Methods of determination of optimal intervals between controls, *Questions of Shipbuilding. Standardization and Metrology* 28, 1985.

5. Evaluation of intervals between controls when the information about reliability of measure instruments is not complete (with V. D. Diment and V. V. Popov), *Questions of Shipbuilding. Standardization and Metrology* 29, 1985.

6. Computation of rational intervals between controls for measure instruments (with V. I. Bondarev and V. V. Popov), *Economics of the Shipbuilding Industry* 4, 1985.

7. On some method of computation of intervals between controls (with V. V. Popov), *Economics of the Shipbuilding Industry* 1, 1987.

REFERENCES

Professor Gerard Buskes
Department of Mathematics
University of Miossissippi
329 Hume, University, MS 38677
(662) 915-7425
mmbuskes@olemiss.edu

Professor Joanne Darken
Department of Mathematics
Community College of Philadelphia
1700 Spring Garden Street, Philadelphia, PA 19130
(215) 751-8721
jdarken@ccp.edu

Professor A.W. Wickstead
Department of Pure Mathematics
Queen's University Belfast
School of Mathematics and Physics
Queen's University Belfast University Road Belfast BT7 1NN
011 44 28 9097 3673
a.wickstead@qub.ac.uk