

CURRICULUM VITAE
Florin Radulescu

BIRTHDATE: August 15, 1960.

Ph. D. in Mathematics: June 1991, University of California at Los Angeles

Title of Thesis: The fundamental group of the free group with infinitely many generators is $\mathbb{R}_+ \backslash \{0\}$.

Thesis Advisor: S. Popa.

Other Interests: Operator Algebras, Ergodic Theory, Group Representation Theory, Mathematical Physics.

EDUCATIONAL BACKGROUND:

Fall 1990- Spring 1991, University of California, Los Angeles.

Degree received: Ph. D. in Mathematical Sciences, June 1991.

February 1991-

Thesis Advisor: Prof F.-H. Vasilescu

This degree meant the admittance of the candidate to start a research programme leading to a doctoral degree. During 1985-1989 there were only a limited number (25 aprox. in mathematics) of positions in such a programme in Romania. Since 1985, February 1989 was the first date when new admittance to PhD programmes was accepted.

Fall 1979- Spring 1983, University of Bucharest, Romania.

Degree received: (Romanian) Masters in Mathematics, 6/1983.

Field of specialization: Operator Theory, Quantum Mechanics, Partial Differential Equations.

Thesis Advisor: Prof. M. Sabac

PROFESSIONAL EXPERIENCE:

Professor, University of Iowa, Spring 1996-present.

Assoc. Prof., University of Iowa, August 1994-Spring 1996.

NATO-NSERC Postdoctoral Research Fellow, University of Toronto, Summer 1994.

Sponsor: Research Fellow Institut des Hautes Etudes Scientifiques, Bures sur Yvette, Sept. 1991- Aug. 1992.

(Combined UCLA-IHES postdoctoral research fellow in Operator Theory)

Researcher, Institute of Mathematics of the Romanian Academy, Summer 1987- Spring 1990.

Junior Researcher, Institute of Mathematics of the Romanian Academy,

PUBLICATIONS:

1. F. Radulescu, A type factor with core isomorphic to the free group von Neumann algebra of a free group tensor , in Proceedings of the Operator Algebras Conference 1992, Orleans, Asterisque, G. Skandalis, ed., Paris, France, June 1995. ([.dvi file](#)) ([.ps file](#))
2. F. Radulescu, Random matrices, amalgamated free products and subfactors in free group factors of noninteger index, Inv. Math. 115 (1994), 347-389. ([.dvi file](#)) ([.ps file](#))
3. F. Radulescu, On the von Neumann algebra of Toeplitz operators with automorphic symbol, in Subfactors, Proceedings of the Taniguchi Symposium, Kyoto 1993, Araki, H. Kosaki eds., World Scientific, 1994; pp. 287-293. ([.dvi file](#)) ([.ps file](#))
4. F. Radulescu, The weak closure of the group algebras associated to free groups are stably isomorphic, Communications in Mathematical Physics 156 (1993), 17-36.
5. F. Radulescu, A new invariant for subfactors of free group vs of finite groups, Journal of Funct. Analysis 93, (1992), 138-159.
6. F. Radulescu, Vanishing of χ_2 for certain von Neumann Algebras, Transactions of the American Math. Soc. 326 (1991), 569-42.
7. F. Radulescu, A one parameter group of automorphisms of scaling the trace Comptes Rendu Acad. Sci. Paris 314 (1992), 1027-1032. ([.dvi file](#)) ([source file](#)) ([.ps file](#))
8. F. Radulescu, The fundamental group of the von Neumann algebra of a free group with infinitely many generators is \mathbb{R}^+ , Journal of the American Mathematical Society, 5 (1992), 517-532. ([.dvi file](#)) ([.ps file](#))
9. F. Boca, F. Radulescu, Singularity of the radial algebra in free products of finite groups, Journal of Funct. Analysis 93, (1992), 138-159.
10. F. Radulescu, Vanishing of $H_2(M, K(H))$ for certain von Neumann Algebras, Transactions of the American Math. Soc. 326 (1991), 569-42.
11. F. Radulescu, On some trace class norm estimates, J. of Operator Theory 23 (1990), 195-204.
12. F. Radulescu, On smooth extensions of odd dimensional spheres and multidimensional Helton and Howe formula, J. Reine Angew. Math. 386 (1988), 145-171.
13. S. Popa, F. Radulescu, Derivations of von Neumann algebras into the compact ideal space of a semifinite algebra, Duke Mathematical Journal 57 (1988), 485-518.
14. F. Radulescu, F. -H. Vasilescu, Matrix operators and hyperinvariant subspaces, J. London Math.Soc. 36, (1987), 327-338.
15. F. Radulescu, Spectral properties of generalized multipliers, J. Operator Theory 14 (1985), 277-289.
16. F. Radulescu, Derivatives of analytic functions, Rev. Roum. Math. Pures Appl. 26 (1981), 141-142.

17. F. Radulescu, A topological property of related to Froda theorem concerning discontinuities, Rev. Roum. Math. Pures Appl. 26 (1981), 1385-1389.
18. F. Radulescu, On the frontier operator, Bull. Math. Soc. Acad. Roumanie 24 (1980), 401-406.
19. F. Radulescu, The arithmetic Hecke operators and Berezin Quantization, Comptes Rendu Acad. Sci. Paris, 1996. ([.dvi file](#)) ([.ps file](#))
20. F. Radulescu, A new invariant for subfactors of free group von Neumann algebras", Preprint 1995, in the Proceedings of the Fields Institute Workshop in Free Probability, D. Voiculescu ed. ([.dvi file](#)) ([.ps file](#)) ([.tex file](#))
21. F. Radulescu, The invariant form of the Berezin quantization of the upper halfplane (Preprint 1995, to appear in Memoirs A. M. S.). ([.dvi file](#)) ([.ps file](#))

RESEARCH FUNDING

NSF Research Grant, for the three year period 1996-1999.

PROFESSIONAL PRESENTATIONS

- 49 Invited Main Speaker, Conference on Subfactors and Quantum Field Theory, Rome, July 1996.
- 48 Invited speaker, AMS Special Meeting on Quantization, Mount Holyook, July 1996
- 47 Invited Speaker, C^* -Algebras Conference, (1 hour lecture), Oberwohlfach, Germany, April 1996
- 46 Invited Speaker, C^* -Algebras Conference, Nihon University, Tokyo, February 1996.
- 45 Invited Speaker, (90 min lecture), Department of Mathematics, University of Tokyo, February 1996.
- 44 Colloquium speaker, (1 hour lecture), Department of Mathematics, The University of Texas, Austin, November 1995.
- 43 Lecturer, Analysis Seminar, (1 hour lecture), University of Texas, Austin, November 1995.
- 42 Lecturer, Analysis Seminar, University of Tokyo, (90 min. lecture) September 1995.
- 41 Main invited speaker (1 hour lecture) Conference on Operator Algebras, with the occasion of the 150 anniversary of the Cork University, Cork, July 1995.
- 40 Main invited speaker, (two 1 hour and respectively 90 min. lectures), Workshop on Subfactors, in the School of Geometry and Physics, University of Aarhus, June 1995.

- 39 Main invited speaker, (1 hour), Workshop on Subfactors, held at the Fields Mathematical Institute, Canada, with the occasion of the special year in Operator Algebras. April 1995.
- 38 Main invited speaker, (80 min), at the "Workshop on Noncommutative Probability Theory" held at the Fields Mathematical Institute, Canada with the occasion of the special year in Operator Algebras. March 1995.
- 37 Lecture in the Functional Analysis Seminar, (1 hour), at the Institute of Mathematics of the Romanian Academy, Bucharest, January 1995.
- 36 Lecture at the University of Rome 2, (two 1 hour lectures), in the Operator Algebras Seminar, December 1994.
- 35 Lecture in the Functional Analysis Colloquium, (1 hour), University of Toronto, September 1995.
- 34 Main invited speaker, (1 hour), at the Satellite Conference of the International Congress, on Operator Algebras, Geneve, July 1994.
- 33 Colloquium speaker, (1 hour), in the Functional Analysis Colloquium at the University of Orleans, June 1994.
- 32 Invited speaker, (1 hour), in the Cartan Seminary at Universite Paris 6, June, 1994.
- 31 Main invited speaker, (1 hour), at the Canadian Symposium on Operator Algebras, Ottawa, May 1994.
- 30 Colloquium speaker, (1 hour), in the Functional Analysis Colloquium at U. C. L. A., May 1994.
- 29 Colloquium speaker, (1 hour), at the University of California, Santa Barbara, May 1994.
- 28 Main invited speaker, (1 hour), at the Special Meeting on Operator Algebras, Oberwolfach February, 1994.
- 27 Colloquium speaker, (1 hour), in "New directions in Mathematics" at the University of Montreal, February, 1994.
- 26 Colloquium speaker, (1 hour), IUPUI University at Indianapolis, Oct 1993.
- 25 Colloquium speaker, (1 hour), Functional Analysis Colloquium, U. C. Berkeley, Sept. 1993.

- 24 Invited speaker (1 hour), C.B.M.S Meeting, Eugene University, Oregon, Summer 1993.
- 23 Main invited speaker (two 1 hour lectures) at the Taniguchi Symposium celebrating the anniversary of Prof. M. Takesaki, Kyoto, Japan, Summer 1993.
- 22 Invited lecturer (1 hour) in V. F. R. Jones seminary, U. C. Berkeley, May 1993.
- 21 Short communication (30 min.) at Great Plains Operator Theory Symposium, Boulder Colorado, Summer 1993.
- 20 Invited lecturer, (eight 1 hour lectures), combined V. F. R. Jones - D. Voiculescu Seminar, U. C. Berkeley, Fall 1992.
- 19 Colloquium speaker, (1 hour), Functional Analysis Colloquium, U. C. Berkeley, Sept. 1992.
- 18 Main invited speaker, (1 hour), at the West Coast Meeting in Operator Algebras, Fall '92, University of Reno, Reno.
- 17 Invited speaker, (30 min.), at the Conference on Operator Algebras with the occasion of the Anniversary of the Royal Danish Academy, Summer 1992, Copenhagen.
- 16 Invited lecture, (90 min.), in A. Connes Seminar, College de France, September 1991.
- 15 Colloquium speaker, (1 hour), Odensee University, May 1992.
- 14 Invited lecturer, (1 hour), Copenhagen University, May 1992.
- 13 Invited lecturer, (1 hour), Universite Paris 7, February 1992.
- 12 Invited speaker, (1 hour), Satellite Conference at the European Congress of Mathematics on Operator Algebras, Orleans, summer 1992.
- 11 Invited Lecture, (90 min.), at the Universite d'Orleans, February 1992, France.
- 10 Invited Lecture, (30 min.), at The Operator Algebras Canadian Symposium, Montreal, Spring 1991.
- 9 Colloquium speaker (1 hour) Functional Analysis Colloquium, U.C.L.A , Spring 1991.
- 8 Invited Lecture, (1 hour), U. C. Berkeley, March 91, Seminar of Professor V. F. R. Jones.
- 7 Invited Speaker, (1hour), Workshop on Subfactors, M. S. R. I., February 1991, Berkeley.

6 Invited lecturer, (90 min.), at the Universite d'Orleans, Spring 1990 France.

5 Invited Speaker, (1 hour), at the Intl. Conference on Operator Algebras and Ergodic Theory, Craiova, 1989.

4 Short communication, (30 min), St-Petersburg Institute of Mathematics, Fall 1988, seminar of Prof. A. Vershik.

3 Short communication, (30 min), St-Petersburg Institute of Mathematics, Fall 1988 Seminar of Prof. N. Nicolski.

2 Invited Speaker, (1 hour), at the Intl. Conference on Operator Theory, Timisoara, Romania, 1988.

1 Invited Lecture, (30 min.), at the Intl. Conf. Operator Theory, Bucharest, 1987.

RESEARCH VISITS:

University of Tokyo, September 1995.

University of Rome 2, Italy, December 1994.

University of Toronto and University of Waterloo, on the occasion of the special year in Operator Algebras, Fall 1994.

Universite Paris 6, France, Summer 1994.

R.I.M.S, Kyoto, Japan, July 1993.

University of Odensee and University of Copenhagen, Denmark, Spring 1992.

Institut des Hautes Etudes Scientifiques, Bures-sur-Yvette, France, May 1990.

Japan, August, 1990, Int. Math. Congress.

St-Petersburg Institute of Mathematics, November, 1988.

COURSES TAUGHT: A. Undergraduate courses

University of Iowa, Matrix algebra for Engineers 22M:025 (Fall 1995); Calculus 1, 22M:040 (Fall 1995); Linear Algebra, 22M:027 (Spring 1995); Foundations of Analysis, 22M:055 (Spring 1995).

Universite de Paris 7, Spring 1992 Travaux diriges. This course in real analysis (equivalent to Calculus I) was aimed to students in their first year at the university.

U.C.L.A., Spring 1991, Calculus 2 (discussion session).

University Bucharest, Spring 1987, Complex Analysis in Several variables, (discussion session).

Math. classes for high school students, Bucharest, Romania, Fall 1984- Spring 1985. The appointment at the Institute of Mathematics of the Romanian Academy required post-graduation teaching training

Trainer, Romanian Team, International Math. Olympiad, 1984-1986.

B. Graduate courses

Free Probability and Subfactors (8 1-hour lectures), Berkeley, Fall 1992, Functional Analysis Seminar.

The Atiyah Singer Index Theorem, University of Bucharest, Romania, Spring 1990. (7 wks, 4 hs/wk, aprox 10 students.)

Subnormal Operators, University of Timisoara, Spring, 1988.

Spectral Properties of Operators in Banach spaces, University of Bucharest, 1984-1989, (discussion session, 10 students).

Operator Algebras, University of Bucharest, Fall 1985, Fall 1986. (discussion session, 10 students).

Advanced course on the Atiyah-Singer Index Theorem, for researchers and advanced students at the Institute of Mathematics of the Romanian Academy, Spring 1988.

Advanced course on Connes's Cyclic Cohomology, for researchers and advanced students at the Institute of Mathematics of the Romanian Academy, Spring 1989.

COMMITTEES

Serving on Ph. D. Thesis Committee of Pierre-Yves le Gal, Universite de Paris 7, (Chair: Prof A. Connes), Paris, June 1994.

SERVICE

A. Professional

Serving as reviewer for Mathematical Reviews, approximately 3 reviews/yr. (since 1988).

Referee for Journal of Operator Theory (since 1987), 1-2 papers/yr.

Referee for the Pacific Journal of Mathematics (since 1991), 1-2 papers/yr.

Referee for the Proceedings of the American Mathematical Society (since 1993), 1 paper/yr.

Occasionally serving as a referee for the following journals: Proc. London Mathematical Society, International Mathematical Journal, Indiana University Mathematical Journal (1 or 2 papers for each of those journals during the period 1992-1995), and for several proceedings.

Serving as referee for NSF proposals in Modern Analysis (2 since 1995).

B. Departmental (Iowa)

Supervising a graduate student, Marius Stefan, toward a Ph. D degree in Mathematics.

Supervision of a student in Honors Program leading to an Honors Thesis (Spring 1995).

C. Departmental (other universities)

Serving as a coordinator, during the year 1993-1994 for an (informal) seminar in Operator Algebra for V. Jones's Ph.D students, during his one year leave (at Jones's request).

Serving as member on the committee for the , admittance exam at the Mathematics Department, University of Bucharest, Sept. 1983.

MEMBERSHIPS

Institute of Mathematics of the Romanian Academy, since 1985.
A. M. S., since 1988.

AWARDS and FELLOWSHIPS

Prize "Simion Stoilow" awarded by the Romanian Academy, Fall 1994. (Yearly award in mathematics by the Romanian Academy).

NSERC-NATO Research grant, Toronto, Summer 1994.

Travel Grant for Young Mathematicians of the International Mathematical Union to attend the International Mathematical Congress, Zurich, 1994.

Miller Research Fellowship at the Miller Institute for Basic Research in Science, U. C. Berkeley, August 1992- July 1994.

Combined Postdoctoral Research Fellowship from U.C.L.A and Institute des Hautes Etudes Scientifiques, Bures sur Yvette, Sept. 1991-Sept. 1992.

Graduate Division Fellowship, U. C. L. A., Fall 1990-Spring 1991.

Travel Grant for Young Mathematicians of the International Mathematical Union, to attend the International Mathematical Congress, Kyoto, Summer 1990.

Award of the "Serghie Brothers Foundation" for graduating students at the University of Bucharest, June, 1983. (5 annual prizes, one in Mathematics).

First prize at the national competition of undergraduate students: "Traian Lalescu", Romania, 1980.