Resumë of John F. Rossi

Business address:

Department of Mathematics
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061
540-231-8272

Date and Place of Birth:

October 13, 1950
Bronx, NY

Education:

BA (Math)	Queens College	June 1972
MA (Math)	University of Hawaii	August 1978
PhD (Math)	University of Hawaii	December 1980

Honors:

1971	Phi Beta Kappa
1972	Summa Cum Laude, Senior Math Prize
1982	NATO Postdoctoral Fellowship, London, England
1988	Senior Fulbright Fellowship, Jyväskylä, Finland
1990	Senior Research Fellowship, York, England (funded by the British Science Research Council)
1991	Mathematical Association of America Visiting Lecturer: 1991 - 1995
1998	X-Caliber Award (for technology excellence at Virginia Tech)
2002	London Math Soc. Programme Committee Award (funding for a research visit to the Univ. of Nottingham)

Employment:

2007-	Professor, Virginia Tech
2001-2007	Head, Virginia Tech
2000-2001	Interim Head, Virginia Tech
1999-2000	Director of Math Emporium, Virginia Tech
1994 (Spring)	Visiting Professor, University of Joensuu, Joensuu, Finland
1993-2000	Professor, Virginia Tech
1990 (Fall)	Senior Research Fellow, University of York, England

1987- 1993	Associate Professor, Virginia Tech
1983-1987	Assistant Professor, Virginia Tech
1988 (Spring)	Senior Fulbright Fellow, Univ. of Jyväskylä, Finland
1985 (Fall)	Visiting Assistant Professor, Univ. of Hawaii
1982-1983	NATO Postdoctoral Fellow, Imperial College, England.
1981-1982	Visiting Assistant Professor, Purdue University
1981 (Spring)	Visiting Assistant Professor, Univ. of Hawaii
1976-1980	Teaching Assistant, Univ. of Hawaii
1972-1975	High School Math Teacher, Guam

Mathematical Papers Presented at Professional Meetings:

American Math. Soc. Meetings:
San Francisco, CA, 1981
Cincinnati, OH, 1982 (invited talk, special session)
Madison, WI, 1982 (invited talk, special session)
Laramie, WY, 1985 (invited talk, special session)
Honolulu, HI, 1987 (invited talk, special session)
Manhattan, KS, 1990 (organizer, special session)
Springfield, MO, 1992 (invited talk, special session)
Dayton, OH, 1992 (invited talk, special session)
Cincinnati, OH, 1994 (invited talk, special session)
Memphis, TN, 1997 (invited talk, special session)
Louisville, KY, 1998 (invited talk, special session)
Charlotte, NC, 1999 (invited talk, special session)
New Orleans, LA, 2001 (invited talk, special session)
Ann Arbor, MI, 2002 (invited talk, special session)
Phoenix, AZ, 2004 (invited talk, special session)
Atlanta, GA 2005 (invited talk,special session)
San Antonio, TX 2006 (invited talk,special session)

London Math. Soc. Symposium on Potential Theory,
Durham, England, 1983 (invited talk, funded)

International Conference on Harmonic Measure and Potential Theory,
Toledo, OH, 1986 (invited talk, funded)

Symposium on Complex Analysis,
London, England, 1987 (invited talk, partially funded)

International Conference on Nevanlinna Theory,
Joensuu, Finland, 1988 (invited talk, funded)

Mini-Conference on Non-Linear, Potential Theory,
Univ. of Kentucky, 1988 (invited talk, funded)

Conference on Function Theory,
Oberwolfach, Germany, 1990 (invited talk, funded)

One-day Function Theory Meeting,
Milton Keynes, England, 1990 (principle speaker, one hour lecture, funded)

Function Theory Conference,
Univ. of Illinois, Urbana, 1991, (invited one hour lecture, funded)

Workshop on the Star Function,
Joensuu, Finland, 1993 (main speaker, 4 one-hour lectures, funded)

Seminar on Complex Analysis and Nonlinear Potential Theory,
Helsinki, Finland, 1994 (main speaker, 2 hour lecture, funded)

Conference on Function Theory,
Oberwolfach, Germany, 1994 (invited talk, funded)

Rolf Nevanlinna Colloquium, Joensuu, Finland, 1995 (invited 30 minute lecture, funded)

Conference on Complex Analysis and Differential Equations, Uppsala, Sweden, 1997
(1 hour plenary talk, travel and local expenses funded)

Conference on Modern Analysis in honor of Boris Levin, Tel Aviv, Israel, 1997
(invited 30 minute lecture, funded)

Conference on Function Theory,
Oberwolfach, Germany, 1999 (invited talk, funded)

Nevanlinna Colloquium, Helsinki, Finland, 2000
(invited 30 minute talk, funded)

ISSAC Conference on Complex Analysis, Yerevan, Armenia, 2002
(plenary lecture, funded)

Conference on Differential and Functional Equations, Loughborough, England, 2003

International conference on Complex Analysis, Beijing, China, 2009
(one hour invited lecture, funded)

Conference on Complex Analysis, Urbana, IL, 2010
(invited 25 minute talk, funded)

Workshop on complex differential equations and value distribution theory, University of Eastern Finland,
(invited plenary talk, funded)

Curriculum Development/Education Papers Presented at Professional Meetings

Hotel Roanoke conference for Virginia High School Teachers, Roanoke, VA, Feb. 1998
(invited hour talk with Robert Olin and Terri Bourdon)

Educom Conference, Orlando, Florida, 1998
(invited hour talk with Robert Olin and Lin Scruggs)

ICTCM Conference, New Orleans, Louisiana, 1998

(invited 90 minute talk with 7 other department members)

Educause Conference, New Orleans, Louisiana, 1999
(invited plenary 1 hour talk with Anne Moore)

Math Sciences Education Board (MSEB) at the National Academy of Sciences,
Washington, DC, 1999 (Panel member, panel on technology)

Board on Mathematical Sciences' 1999 Chairs Colloquium, National Research Council,
Washington, DC, 1999 Panel member, panel on distance learning)

MAA session on Teaching with Technology at the Joint National Meetings,
Washington, DC, 2000 (with Olin, Beattie and Hannsgen)) (invited 10 minute talk)

American Association for Higher Education (AAHE), New Orleans, LA, 2000
(with Olin and Beattie)(invited 90 minute presentation on Teaching and Learning)

Conference of Mississippi Community College Math teachers, Jackson, MS.,2000
(invited 60 minute talk)

Course Transformation Conference, Orlando, FL, 2000
(invited 90 minute talk)

American Council on Education invitational symposium
Washington, DC, 2000(with Olin, Hannsgen, Beattie) (invited presentation)

Frye Leadership Council, Emory University, Atlanta, GA, 2000
(invited 90 minute plenary talk)

National Learning Institute Initiative (NLII) National Meeting, 2001
(invited 45 minute talk)

Frye Leadership Council, Emory University, Atlanta, GA, 2001
(invited 90 minute plenary talk)

Center for Academic Transformation conference, Philadelphia, PA 2002
(invited 1 hour talk)

Frye Leadership Council, Emory University, Atlanta, GA, 2002
(invited 90 minute plenary talk)

Conference on teaching with technology, Marymount University, Arlington, VA 2003
(invited 90 minute plenary talk)

Frye Leadership Council, Emory University, Atlanta, GA, 2003
(invited 90 minute plenary talk)

Conference on Mathematics in the Engineering Curriculum, Georgia Tech, 2006
(invited hour talk)

Colloquia:

University of Hawaii, 1981
University of Wisconsin, 1981
Purdue University, 1981
Washington University, 1982
Open University (England), 1982
Imperial College (England), 1982, 1983
Uppsala University (Sweden), 1983
University of Göteberg (Sweden), 1983
ETH Zurich (Switzerland), 1983
Virginia Tech, 1983
Syracuse University, 1984
University of Tennessee, 1984
University of Georgia, 1984
University of Illinois, 1984
University of Michigan, 1985
University of Hawaii. 1985
University of Wisconsin, 1986
Purdue University, 1986
University of Maryland, 1987
University of Cincinnati, 1987
Uppsala University (Sweden), 1988
University of Helsinki (Finland), 1988
University of Texas, 1989
University of York (England), 1990
University of Aachen (Germany), 1990
University of Hannover (Germany), 1990
St. Patrick's College (Ireland), 1990
Trinity College (Ireland), 1990
University College, Cork (Ireland), 1990
Open University (England), 1990
Imperial College (England), 1990
University of Joensuu (Finland), 1990
Virginia Tech, 1992
Virginia State University, 1993
University of Illinois, 1993
University of Joensuu (Finland), 1994
University of Jyväskylä (Finland), 1994
Univerity of Uppsala (Sweden), 1994
University of Otago (New Zealand), 1996
Hong Kong University of Science and Technology (Hong Kong),1997
University of Mississippi, 2000
National University of San Marcos, Lima, Peru 2004
Northern Illinois University, 2004
University of Trier (Germany), 2005
Worcester Polytechnic Institute (2 lectures), 2006
University of South Florida, 2006
Virginia Tech, 2012
University of Havana 2015

National University of San Marco, Lima, Peru 2015

Other Scholarly Activities:

Review of Math Department, Cal State Univ. at Monterrey Bay, April 2002
NSF grant reviewer
Referee for various journals
Textbook reviewer

Publications:

1. Marvin Ortel and John Rossi, *An exercise involving conditional probability*, Math. Magazine, 54 (1981), 125-128.

2. John Rossi, *The reciprocal of an entire function of infinite order and the distribution of the zeros of its second derivative*, Trans. Amer. Math. Soc. , 270 (1982), 667-683.

3. John Rossi and Jack Williamson, *Asymptotic estimates for functions extremal for Baernstein's cos$\beta\lambda$ theorem*, J. Analyse Math. , 42 (1983), 128-154.

4. John Rossi and Allen Weitsman, *A unified approach to certain questions in value distribution theory*, J. London Math. Soc. , 28 (1983), 310-326.

5. John Lewis, John Rossi and Allen Weitsman, *On the growth of subharmonic functions along paths*, Ark. Math. , 22 (1984), 109-119.

6. Matts Essén, John Rossi and Daniel Shea, *A convolution inequality with applications to function theory*, Amer. Math. Soc. Contemporary Math. Ser: Value distribution and its applications, (1984), 141-147.

7. Walter Hayman and John Rossi, *Characteristic, maximum modulus and value distribution*, Trans. Amer. Math. Soc. , 92 (1984), 651-654.

8. Aimo Hinkkanen and John Rossi, *On a problem of Hellerstein, Shen and Williamson*, Proc. Amer. Math. Soc. , 92 (1984), 72-74.

9. John Rossi, *The length of asymptotic paths of harmonic functions*, J. London Math. Soc. (2), 30 (1984), 73-78.

10. John Rossi and Allen Weitsman, *The growth of entire and harmonic functions along asymptotic paths*, Comm. Math. Helv. 60 (1985), 1-14. *Correction*, Comm. Math. Helv. 60 (1985), 15.

11. John Rossi, *Second order differential equations with transcendental coefficients*, Proc. Amer. Math. Soc. 97 (1986), 61-66.

12. Simon Hellerstein and John Rossi, *Zeros of meromorphic solutions of second order linear differential equations*, Math. Z. 192 (1986), 603-612.

13. John Rossi, *The Tsuji characteristic and real zeros of solutions of second order ODE's*, J. London Math. Soc. 36 (1987), 490-500.

14. John Rossi, *Zeros of second order ODE's with transcendental coefficients* in Analysis of One Complex Variable, Proc. of AMS Summer Meeting, Laramie, 1985, World Scientific (1987), 175-180.

15. John Rossi, *A halfplane version of a theorem of Borel*, in Holomorphic Functions and Moduli I, Proc. of MSRI Conference, 1986, Springer (1988), 111-118 (*refereed*).

16. Aimo Hinkkanen and John Rossi, *Second order differential equations with rational coefficients*, Proc. Amer. Math. Soc. 106 (1989) 667-678.

17. Juha Heinonen, Tero Kilpeläinen and John Rossi, *The growth of A-subharmonic functions and quasiregualar maps along asymptotic path*, Indiana Math. J. 38 (1989), 581-601.

18. Simon Hellerstein and John Rossi, *On the distribution of zeros of second order ODE's*, Complex Variables 13 (1989), 99-109.

19. Juha Heinonen and John Rossi, *Lindelöf's Theorem for normal quasiregular mappings*, Michigan Math. J. 37 (1990) 219-226.

20. Simon Hellerstein, Joseph Miles and John Rossi, *On the growth of solutions to* $f'' + gf' + hf = 0$, Trans. Amer. Math. Soc. 324 (1991), 693-706.

21. Aimo Hinkkanen and John Rossi, *Schwarzian derivatives and zeros of solutions to second order linear differential equations*, Proc. Amer. Math. Soc. 113 (1991) 741-746.

22. Simon Hellerstein, Joseph Miles and John Rossi, *On the growth of solutions to certain linear differential equations of order n*, Ann. Acad. Sci. Fenn. 17 (1992) 343-365.

23. Juha Heinonen and John Rossi, *Remarks on the value distribution of quasimeromorphic mappings*, Complex Variables 21 (1993) 231-242.

24. James Clunie, Alexandre Eremenko and John Rossi, *On equilibrium points of logarithmic and Newtonian potentials* , J. London Math Soc. (2) 47 (1993) 309-320.

25. John Rossi, *The radial growth of entire functions with density conditions*, Complex Variables 22 (1993) 175-180.

26. Matts Essén, John Rossi and Daniel Shea, *A convolution inequality with applications to function theory II*, J. Analyse Math. 61 (1993) 339-366.

27. Alexandre Eremenko, James Langley and John Rossi, *On the zeros of meromorphic functions of the form* $\sum_{k=1}^{\infty} \frac{a_k}{(z-z_k)}$, J. Analyse Math. 62 (1994) 271-286.

28. John Rossi, *A sharp result concerning cercles de remplissage*, Ann. Acad. Sci. Fenn.20 (1995) 179-185.

29. Jiuyi Cheng and John Rossi, *Some local properties of the solutions of second-order differential equations*, J. Australian Math. Soc., 59 (1995), 255-265.

30. A. Hinkkanen and John Rossi, *Entire functions with asymptotic functions*, Math Scand 77 (1995) 153-160.

31. Joseph Miles and John Rossi, *Linear combinations of logarithmic derivatives of entire functions with applications ot differential equations*, Pacific Math. J. 174 (1996) 195-214.

32. John Rossi and Shupei Wang, *The radial oscillation of solutions to ODE's in the complex domain*, Proc. Edinburgh Math. Soc.39 (1996) 473-483.

33. Alexander Fryntov, John Rossi and Allen Weitstman, *On the longest arc relation for* δ*-subharmonic functions*, Complex Variables 34 (1997) 99-108

34. Joseph Miles and John Rossi, *On the zeros of entire functions of small positive order and their derivatives*, Izvestia Nat. Academii Nauk Armenii, Math. 32, no. 3 (1997) 83-87(refereed). Translation in J. Contemp. Math. Anal. 32, no. 3 (1997) 68-72.

35. Colm Mulcahy and John Rossi, *A fresh approach to Singular Value Decomposition*, College Math. J.,29 (1998) 199-207.

36. Alexander Fryntov, John Rossi and Allen Weitsman, *Circular means of fine Green's functions and the longest arc relation*, Complex Variables 37 (1998), 211-224.

37. P.C. Fenton and John Rossi, Cercles de remplissage *for Entire Functions*. Bull. London Math. Soc. 31, no. 1 (1999) 59-66.

38. P.C. Fenton and John Rossi, *A Remark on* cercles de remplissage *and Zalcman's Lemma*, Complex Analysis and Differential Equations. Proceedings of the Marcus Wallenberg Symposium in Honor of Matts Essén held in Uppsala, Sweden, June 15-18, 1997, Acta Universitatis Upsaliensis (1999) 157-161 (refereed).

39. Joseph Miles and John Rossi, *On a conjecture of Fuchs*, Proc. Edinburgh Math. Soc. 131, no. 5 (2001) 1209-1216.

40. Alexander Fryntov and John Rossi, *Hyperbolic symmetrization and an inequality of Dyn'kin*, Israeli Math. Conference Proceedings 15 (2001) 103-115 (refereed).

41. P.C. Fenton and John Rossi, *Growth of functions in* cercles de remplissage, Journal Australian Math. Soc. 72 (2002) 131-136.

42. P.C. Fenton and John Rossi, *Phragmén-Lindelöf Theorems*. Proc. Amer. Math. Soc. 132 (2004), no. 3, 761–768.

43. J.K. Langley and John Rossi, *Meromorphic Functions of the form* $f(z) = \sum_{n=1}^{\infty} a_n/(z - z_n)$, Rev. Math. Iberoamericano 20 (2004), no. 1, 285-314.

44. Christopher Beattie, Mark Embree and John Rossi *Convergence of restarted Krylov subspaces. to invariant subspaces*, SIAM J. Matrix Anal.and Appl. 25 (2004), no. 3, 1074-1109.

45. P.C. Fenton and John Rossi, $\cos \pi\rho$ *theorems for* δ*-subharmonic functions*. J. Analyse Math. 92 (2004), 385-396.

46. J.K. Langley and John Rossi, *Critical points of certain discrete potentials*, Complex Variables 49 (2004), 621-637.

47. P.C. Fenton and John Rossi, *Estimates for singular integral operators*, Comput. Methods Funct. Theory 8 (2008), No. 1, 35–46.

48. P.C. Fenton and John Rossi, *A reverse Denjoy theorem*, Bull. London Math. Soc. 41 (2009) 27-35.

49. P.C. Fenton and John Rossi, *A technique of Beurling for lower order*, Ann. Acad. Sci. Fenn. 34 (2009), 379-386.

50. P.C. Fenton and John Rossi, *A reverse Denjoy theorem II*, J.Analyse, 110 (2010), 385-395.

51. P.C. Fenton and John Rossi,*ODEs and Wiman-Valiron theory in the unit disk*, JMAA 367 (2010), 137-145.

52. P.C. Fenton and John Rossi, *A reverse Denjoy theorem III*, Science China Mathematics, 53 (2010) 657-662.

53. P.C. Fenton and John Rossi, *Two variable Wiman-Valiron theory and PDEs*, Ann. Acad. Sci. Fenn. Math., 35 (2010), 571-580. *Errata*: ArXiv:1009.6225.

54. P.C. Fenton and John Rossi, *Wiman-Valiron theory in simply connected regions*, Comput. Methods Funct. Theory, 111 (2011) 229-235.

55. P.C. Fenton and John Rossi, *A reverse* $\cos \pi\rho$ *theorem and a question of Fryntoff*, Comput. Methods Funct. Theory, 12 (2012), No. 1, 167–172.

56. P.C. Fenton, J. Gröhn, J. Heittokangas, J. Rossi, J. Rättyä, *On* α*-polynomial regular functions with applications to ODEs*, Proc. Edinburgh Math. Soc., 57 (2014), 405-421.

57. P.C. Fenton and John Rossi, *Subharmonic functions that are harmonic when they are large*, Anal. Math. Phys 4 (2014), no. 1-2, 115-130.

58. J.K. Langley and John Rossi, *Wiman-Valiron theory for a class of meromorphic functions in the unit disc*, Proc. Royal Irish Math. Soc.(2014) No. 2, 137-148.

59. P.C. Fenton and John Rossi, *A non-power series approach to Wiman-Valiron Theory*, Ann. Acad. Sci. Fenn. (2016) No. 1, 343-355.