Publications of L C G Rogers:

1. 'The interrelations between Moiré patterns, contour fringes, optical sufaces and their sum and difference effects' (with G. L. Rogers), *Optica Acta* **24**, 1977, 15–22.

2. 'The probability that two samples in the plane will have disjoint convex hulls' *J. Appl. Probab.* **15**, 1978, 790–802.

3. 'Markov functions' (with J. W. Pitman) *Ann. Probab.* **9**, 1981, 573–582.

4. 'Characterizing all diffusions with the $2M - X$ property' *Ann. Probab.* **9**, 1981, 561–572.

5. 'Wiener-Hopf factorisation for matrices' (with M. T. Barlow and D. Williams) *Séminaire de Probabilités XIV*, 1980, 324–331.

6. 'Time substitution based on fluctuating additive functionals' (with D. Williams) *Séminaire de Probabilités XIV*, 1980, 332–342.

7. 'Williams' characterisation of the Brownian excursion law; proof and applications' *Séminaire de Probabilités XV*, 1981, 227–249.

8. 'Stochastic integrals: basic theory' *Proceedings of the 1980 LMS Symposium on Stochastic Integrals*, 1981, 56–72.

9. 'A martingale approach to some Wiener-Hopf problems I' (with R. R. London, H. P. McKean, and D. Williams) *Séminaire de Probabilités XVI*, 1982, 41–67.

10. 'A martingale approach to some Wiener-Hopf problems II' (with R. R. London, H. P. McKean, and D. Williams) *Séminaire de Probabilités XVI*, 1982, 68–90.

11. 'Itô excursion theory via resolvents' *Z. Wahrscheinlichkeitsth. verw. Geb.* **63**, 1983, 237–255.

12. 'Wiener-Hopf factorisation of diffusions and Lévy processes' *Proc. London Math. Soc.* **47**, 1983, 177–191.

13. 'A new identity for Lévy processes' *Ann. Inst. Henri Poincaré* **20**, 1984, 21–34.

14. 'A diffusion first passage problem' *Seminar on Stochastic Processes, 1983*, 151–160. Birkhaüser, Boston, 1984.

15. 'The k-record processes are i.i.d..' (with C. M. Goldie) *Z. Wahrscheinlichkeitsth. verw. Geb.* **67**, 1984, 197–211.

16. 'Recurrence of additive functionals of Markov chains' *Sankhya A* **47**, 47–56, 1985.

17. 'Brownian local times and branching processes' *Séminaire de Probabilités XVIII*, 1984, 42–55.

18. 'Smooth transition densities for one-dimensional diffusions' *Bull. London Math. Soc.* **17**, 1985, 157–161.

19. 'A differential equation in Wiener-Hopf theory' (with D. Williams) *Stochastic Analysis and its Applications, Springer Lecture Notes* **1095**, 1984, 187–199.

20. '$BM(\mathbb{R}^3)$ and its area integral $\int \beta \wedge d\beta$' (with G. C. Price and D. Williams) *Stochastic Analysis and its Applications, Springer Lecture Notes* **1095**, 1984, 155–165.

21. 'Coupling of multidimensional diffusion processes by reflection' (with T. Lindvall) *Ann. Probab.* **14**, 1986, 860–872.

22. 'Characterizing one-dimensional diffusions using stochastic calculus' *Bull. London Math. Soc.* **19**, 1987, 183–185.

23. 'Brownian motion of ellipsoids' (with J. R. Norris and D. Williams) *Trans. Amer. Math. Soc.* **294**, 1986, 757–765.

24. 'Self-avoiding random walk: a Brownian motion model with local time drift' (with J. R. Norris and D. Williams) *Prob. Th. and Rel. Fields* **74**, 1987, 271–287.

25. 'Construction and approximation of transition matrix functions' (with D. Williams) *Analytic and Geometric Stochastics*, ed. D. G. Kendall, 1986, 133-160.

26. 'Continuity of martingales in the Brownian excursion filtration' *Prob. Th. and Rel. Fields* **76**, 1987, 291–298.

27. 'Skew-product decompositions of Brownian motions' (with E. J. Pauwels) *Contemporary Mathematics* **73**, AMS, Providence R.I., 1988, 237–262.

28. 'Local time and stochastic area integrals' (with J. B. Walsh). *Ann. Prob.* **19**, 1991, 457–483.

29. 'The intrinsic local time sheet of Brownian motion' (with J. B. Walsh). *Prob. Th. Rel. Fields.* **88**, 1991, 363–379.

30. 'Multiple points of Markov processes in a complete metric space'. *Séminaire de Probabilités, XXIII*, 1989, 186-197.

31. 'Coupling and the tail σ-field of a one-dimensional diffusion' 78-88, *Stochastic Calculus in Application* (ed. J.R. Norris) Longman, Harlow, 1988.

32. 'A guided tour through excursions'. *Bull. London Math. Soc.* **21**, 1989, 305–341.

33. 'Embedding optimal selection problems in a Poisson process' (with F.T. Bruss). *Stoch. Proc. Appl.* **38**, 1991, 267–278.

34. 'Characterisation of Pascal process' (with F.T. Bruss). *Stoch. Procs. Appl.* **37**, 1991, 331–338.

35. 'Statistical analysis of AES data from thin film growth modes' (with G.E. Rhead).

Thin Solid Films **188**, 1990, 109–122.

36. 'Brownian motion in a wedge with variable skew reflection'. *Trans. Amer. Math. Soc.* **326**, 1991, 227–236.

37. 'Stochastic ordering of order statistics' (with A.D. Barbour and T. Lindvall). *J. Appl. Prob.* **28**, 1991, 278–286.

38. ' Brownian motion in a wedge with variable skew reflection II'. *Diffusion Processes and Related Problems in Analysis, Vol. 1* 95–115, ed. M Pinsky. Birkhäuser, Boston 1990.

39. 'Summability methods and almost-sure convergence' (with N. H. Bingham.) *Almost-Everywhere Convergence II*, 69–83, ed. A. Bellow, R. L. Jones. Academic Press, New York 1991.

40. 'Limit theorems for transient diffusions on the line' (with D. G. Hobson.) *Prob. Th. Rel. Fields* **89**, 1991, 61–74.

41. '$A(t, B(t))$ is not a semimartingale' (with J. B. Walsh.) *Seminar on Stochastic Processes 1990*, 275–283, eds. P. J. Fitzsimmons and R. J. Williams. Birkhäuser, Boston 1991.

42. 'The exact 4/3 variation of a process arising from Brownian motion' (with J. B. Walsh.) *Stochastics and Stochastics Reports* **51** , 1994, 267–291.

43. 'Estimating variance from high, low and closing prices' (with S. E. Satchell.) *Ann. Appl. Prob.* **1**, 1991, 504–512.

44. 'Decomposing the branching Brownian path' (with K. M. Jansons.) *Ann. Appl. Prob.* **2**, 1992, 973–986.

45. 'Asymptotic behaviour of Brownian polymers' (with R. T. Durrett.) *Prob. Th. Rel. Fields* **92**, 1992, 337–349.

46. 'Probability theory and polymer physics' (with K. M. Jansons.) *J. Stat. Physics* **65**, 1991, 139–165.

47. 'Probability and dispersion theory' (with K .M. Jansons.) *IMA J. Appl. Math.* **55**, 1995, 149–162.

48. 'Equivalent martingale measures and no-arbitrage'. *Stochastics and Stochastics Reports* **51**, 1994, 41–49.

49. 'On polymer conformations in elongational flows' (with T. Chan, D. Dean, and K. M. Jansons.) *Comm. Math. Phys.* **160**, 1994, 239–257.

50. 'Recurrence of two-dimensional drifting reflecting Brownian motion in a quadrant' (with D. G. Hobson.) *Math. Proc. Cam. Phil. Soc.* **113**, 1993, 387–399.

51. 'Quadratic functionals of Gaussian processes, optimal control, and the "Colditz" example' (with Z. Shi.) *Stochastics and Stochastics Reports* **41**, 1992, 201–218.

52. 'Interacting Brownian particles and the Wigner law' (with Z. Shi.) *Prob. Th. Rel. Fields* **95**, 1993, 555–570.

53. 'The estimation of the volatility of stock prices: a comparison of some different methods that use high and low prices.' (with S. E. Satchell and Y. Yoon.) *Appl. Fin. Econ.* **4**, 1994, 241–247.

54. 'The joint law of the maximum and the terminal value of a martingale.' *Prob. Th. Rel. Fields* **95**, 1993, 451–466.

55. 'Are stock prices driven by the volume of trade? Empirical analysis of the FT30, FT100 and certain British shares over 1988–1990' (with S. E. Satchell and Y.Yoon.) In *Return Distributions in Finance*, Knight, J. & Satchell, S. E., (editors), Butterworth-Heinemann, Oxford, 2001, 118–142 (ISBN = 0750647515).

56. 'The harmonic functions of (A_t, B_t).' *Math. Proc. Camb. Phil. Soc.* **114**, 1993, 369–377.

57. 'Fluid models in queueing theory and Wiener-Hopf factorisation of Markov chains.' *Ann. Appl. Prob.* **4**, 1994, 390–413.

58. 'Computing the invariant law of a fluid model.' (with Z. Shi.) *J. Appl. Probability,* **31** , 1994, 885–896.

59. 'The value of an Asian option' (with Z.Shi.) *J. Appl. Probability,* **32**, 1995, 1077–1088.

60. 'Time-reversal of the noisy Wiener-Hopf factorisation.' *Proc. Symposia Pure Math.,* **57**, 129–135, American Math. Soc., Providence RI, 1995.

61. 'Which model for term-structure of interest rates should one use?' *Mathematical Finance, IMA Volume 65*, 93–116, Springer, New York, 1995.

62. 'On coupling of random walks and Lévy processes' (with T. Lindvall.) *J. Appl. Probability,* **33**, 1996, 122-126.

63. 'Portfolio turnpikes' (with K. Back and P. H. Dybvig.) *Rev. Fin. Studies* **12**,1999,165–195.

64. 'A proof of Dassios' representation of the α-quantile of Brownian motion with drift' (with P. Embrechts and M. Yor.) *Ann. Appl. Probability* **5**, 1995, 757–767.

65. 'Consistent fitting of one-factor models to interest rate data' (with W. Stummer.) *Insurance Mathematics and Economics* **27**, 45–63, 2000.

66. 'Complete models of stochastic volatility' (with D. G. Hobson.) *Mathematical Finance* **8**, 27–48, 1998.

67. 'Recovery of preferences from observed portfolio choice in a single realisation' (with P. H. Dybvig.) *Rev. Fin. Studies* **10**,1997, 151–174.

68. 'Gaussian errors.' *RISK* **9**, January 1996, 42–45.

69. 'Arbitrage from fractional Brownian motion'. *Mathematical Finance* **7**, 1997, 95–105.

70. 'Volatility estimation with price quanta'. *Mathematical Finance* **8**, 1998, 277–290.

71. 'The potential approach to the term structure of interest rates and foreign exchange rates'. *Mathematical Finance* **7**, 1997, 157–176.

72. 'Fitting potential models to interest rates and foreign exchange rates', (with O. Zane). *Vasicek and beyond*, ed. L. P. Hughston, RISK Publications, London 1997, 327–342.

73. 'One for all'. *RISK* **10**, 57–59, March 1997.

74. 'Fast, accurate and inelegant valuation of American options', (with A. Joubert.) In *Numerical Methods in Finance*, eds. L. C. G. Rogers & D. Talay, 88–92, Cambridge University Press, 1997.

75. 'Fastest coupling of random walks'. *J. London Math. Soc.* **60**, 630–640, 2000

76. 'Fast accurate binomial pricing of options' (with E. J. Stapleton.) *Finance and Stochastics* **2**, 3–17, 1998.

77. 'Stochastic calculus and Markov methods'. In *Mathematics of Derivative Securities*, M. A. H. Dempster and S. R. Pliska, editors, 15–40, Cambridge University Press, 1997.

78. 'Valuing moving barrier options' (with Omar Zane.) *J. Comp. Finance* **1**, 1997, 5–11.

79. 'Saddle-point approximations to option prices' (with Omar Zane.) *Ann. Appl. Probability* **9**, 493–503, 1999.

80. 'The relaxed investor and parameter uncertainty'. *Finance & Stochastics* **5**, 131–154, 2001.

81. 'A simple model of liquidity effects' (with Omar Zane). *Advances in Finance and Stochastics: Essays in Honour of Dieter Sondermann*, eds. K. Sandmann and P. Schoenbucher, pp 161–176, Springer, Berlin, 2002 (IBSN = 3 540 43464 X).

82. 'Designing and estimating models of high-frequency data' (with Omar Zane). Submitted 1998.

83. 'Volatility forecasting in a tick data model'. In *Forecasting Voaltility in the Financial Markets*, eds. J. L. Knight and S. E. Satchell, Butterworth-Heinemann, Oxford, 1998

84. 'Does the behaviour of the asset tell us anything about the option price formula? A cautionary tale.' (with S. E. Satchell). *Appl. Financial Econ.* **10**, 2000, 37–39.

85. 'Evaluating the optimal solution of the Davis-Norman-Rishel problem' (with R. H. Stockbridge). In preparation.

86. 'The origins of risk-neutral pricing and the Black-Scholes formula.' In *Handbook of Risk Management and Analysis*, ed. C. O. Alexander, Wiley, Chichester, 1998.

87. 'Utility maximisation with time-lagged trading' (with E. J. Stapleton). *Computational Methods in Decision-Making, Economics and Finance*, eds. E.J. Kontoghiorghes, B. Rustem and S. Siokos, pp 249–269, Kluwer, 2002 (ISBN = 1 4020 0839 2).

88. 'The maximum maximum of a martingale constrained by an intermediate law' (with H. M. Brown and D. G. Hobson). *Probability Theory and Related Fields* **119**, 2001, 558–578.

89. 'Robust hedging of barrier options' (with H. M. Brown and D. G. Hobson). *Mathematical Finance* **11**, 2001, 285–314.

90. 'Optimal stopping and embedding' (with D. Lamberton). *Journal of Applied Probability* **37**, 2000, 1143–1148.

91. 'Evaluating first-passage probabilities for spectrally one-sided Lévy processes'. *Journal of Applied Probability* **37**, 2000, 1173-1180.

92. 'Why is the effect of proportional transactions costs $O(\delta^{2/3})$?'. In *Mathematics of Finance, AMS Contemporary Mathematics Series,* **351**, G. Yin and Q. Zhang (eds.), 303–308, 2004.

93. 'Optimal capital structure and endogenous default' (with B. Hilberink). *Finance & Stochastics* **6**, 2002, 237–264.

94. 'Markov chains and the potential approach to modelling interest rates and exchange rates' (with F. A. Yousaf). *Mathematical Finance - Bachelier Congress 2000*, ed. H. Geman, D. Madan, S. R. Pliska, & T. Vorst, Springer 2002.

95. 'Examining the effects of shocks to a market equilibrium' (with F. A. Yousaf). In preparation.

96. 'Large investors, takeovers and the rule of law' (with J. P. Heritage). *Monte Carlo Methods and Applications* **8**, 2002, 357–370.

97. 'Duality in optimal investment and consumption problems with market frictions.' (with Irene Klein.) *Mathematical Finance* **17**, 2007, 225–247.

98. 'Monte Carlo valuation of American options.' *Mathematical Finance* **12**, 2002, 271–286.

99. 'Duality in constrained optimal investment and consumption problems: a synthesis'. *Paris-Princeton Lectures on Mathematical Finance 2002, (Springer Lecture Notes in Mathematics 1814)*, Springer, Berlin, 2003, 95–131.

100. 'Two-sector stochastic growth models.' (with P M Hartley). *Australian Economic Papers* **44**, 322–351, 2005.

101. 'The squared Ornstein-Uhlenbeck market.' (with J Aquilina). *Mathematical Finance* **14**, 487–513, 2004.

102. 'Optimal exercise of executive stock options' (with J. Scheinkman). *Finance and Stochastics* **11**, 357–372, 2007.

103. 'The cost of illiquidity and its effects on hedging' (with S. Singh). *Mathematical Finance* **20**, 597–615,2010.

104. 'Modelling liquidity effects in discrete time.' (with Umut Cetin.) *Mathematical Finance* **17**, 15–29, 2007

105. 'Option pricing with Markov-modulated dynamics.' (with A. Jobert.) *SIAM Journal on Control and Optimization* **44**, 2063–2078, 2006.

106. 'Equity with Markov-modulated dividends.' (with G. Di Graziano.) *Quantitative Finance* **9**, 19-26, 2009.

107. 'Valuations and dynamic convex risk measures' (with A. Jobert.) *Mathematical Finance* **18**, 1–22, 2008.

108. 'Barrier option pricing for assets with Markov -modulated dividends.' (with G. Di Graziano.) *Journal of Computational Finance* **9**, 75–87, 2006.

109. 'Stocks paying discrete dividends: modelling and option pricing.' (with Ralf Korn.) *Journal of Derivatives* **13,2**, 44–48, 2005.

110. 'Pathwise stochastic optimal control.' *SIAM Journal on Control and Optimization* **46**, 1116–1132, 2007.

111. ' A dynamic approach to the modelling of correlation credit derivatives using Markov chains' (with Peppe di Graziano) *International Journal of Theoretical and Applied Finance* **12**, 1–18, 2009.

112. 'One for all: the potential approach to pricing and hedging.' in *Progress in Industrial Mathematics at ECMI 2004* eds. A. Di Bucchianico, R. M. M. Mattheij, M. A. Peletier, Springer, Berlin, 2006. (ISBN-10 3540280723).

113. 'Estimating correlation from high, low, opening and closing prices' (with Fanyin Zhou). *Annals of Applied Probability* **18**, 813–823, 2008.

114. 'The correlation of the maxima of correlated Brownian motions' (with Larry Shepp) *Journal of Applied Probability* **43**, 880–883, 2006.

115. 'Can the implied volatility surface move by parallel shifts?' (with Mike Tehranchi) *Finance & Stochastics* **14**, 235–248, 2010.

116. 'A stochastic volatility alternative to SABR' (with Luitgard Veraart) *Journal of Applied Probability* **45**, 1071–1085, 2008.

117. 'Optimal and robust contracts for a risk-constrained principal' *Mathematics and Financial Economics* **2**, 151–171, 2009.

118. 'Dual valuation and hedging of Bermudan options' *SIAM Journal on Financial Mathematics* **1**, 604–608, 2010.

119. 'Optimal time to exchange two baskets' (with Katsumasa Nishide) *Journal of Applied Probability* **48**, 21–30, 2011.

120. 'Heterogeneous beliefs with mortal agents' (with Angus Brown), in *Recent advances in Financial Engineering 2009*, eds. M. Kijima, C. Hara, K. Tanaka, Y. Muromachi, World Scientific, Singapore, 2010.

121. 'The potential approach in practice' (with Tino Kluge). arxiv:1204.5718v1 (2012).

122. 'Trading to stops' (with Nora Imkeller). Submitted 2011.

123. 'Market selection: hungry misers and bloated bankrupts' (with Katsumasa Nishide). *Mathematics and Financial Economics* **5**, 47–66, 2011.

124. 'Diverse beliefs' (with Angus Brown). *Stochastics* **??** , 2012.

125. 'High hopes and disappointment' (with Phil Dybvig). Preprint, 2012.

126. 'Least-action filtering'. Preprint 2012.

127. 'Utilities bounded below'. Submitted 2012.

128. 'An asset return model capturing stylized facts' (with Liang Zhang). *Mathematics and Financial Economics* **5**, 101-119, 2011.

129. 'Failure and rescue in an interbank network' (with Luitgard Veraart). To appear in *Management Science.*

130. 'Firms, banks and households' (with Pawel Zaczkowski). To appear in *Handbook on Systemic Risk*, Cambridge University Press, Cambridge.

Books:

'*Diffusions, Markov Processes and Martingales, Vol. 2*' (with D. Williams), Wiley, Chichester, 1987. (ISBN = 0 471 91482 7)

'*Diffusions, Markov Processes and Martingales, Vol. 1*' (with D. Williams.) Wiley, Chichester, 1994. (ISBN = 0 471 95061 0)

'*Numerical Methods in Finance*' (edited jointly with Denis Talay). Cambridge University Press, 1997. (ISBN = 0 521 57354 8)

Short notes

1. 'A simple proof of Müntz's theorem' *Math. Proc. Camb. Phil. Soc.* **90**, 1981, 1–3.

2. 'Addendum to "Itô excursion theory via resolvents" ' *Z. Wahrscheinlichkeitsth. verw. Geb.* **67**, 1984, 473–476.

3. 'An excluded volume problem for Brownian motion' (with J. R. Norris and D. Williams) *Phys. Letters* **112A**, 1985, 16–18.

4. 'Ignatov's theorem: an abbreviation of the proof of Engelen, Tommassen and Vervaat' *Adv. Appl. Prob.* **21**, 1989, 933–934.

5. 'The two-sided exit problem for spectrally positive Lévy processes' *J. Appl. Prob.* **22**, 1990, 486–487.

6. 'The barrier sensitive tree' (with E. J. Stapleton.) *Derivatives Week,* **8**, No. 3, January 1999, 7–8.

7. 'The relaxed investor'. *RISK Magazine*, January 1999.

Review Articles:

1. '*Stochastic Differential Equations and Diffusion Processes*' by N. Ikeda and S. Watanabe. *Bull. London Math. Soc.* **14**, 1982, 449–450.

2. '*Stochastic calculus and its Applications*' by R. J. Elliott. *Bull. London Math. Soc.* **15**, 1983, 526–528.

3. '*Markov Chains*', '*Approximating Countable Markov Chains*', '*Brownian Motion and Diffusion*' by D. Freedman. *Bull. London Math. Soc.* **16**, 1984, 546–548.

4. '*General Theory of Markov Processes*' by M. J. Sharpe. *Bull. London Math. Soc.* **21**, 1989, 622–623.

5. '*Probability: Theory and Examples*' by R. T. Durrett. *Bull. London Math. Soc.* **24**, 1992, 205–204.