

## CURRICULUM VITAE : N. H. BINGHAM

September 2021

### Personal details

Full name: **NICHOLAS HUGH BINGHAM**

Born: 19 March 1945, York, England. Nationality: British

Marital status: Married, three children

### Address

Mathematics Department, Imperial College London, South Kensington, London SW7 2AZ

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### Education and degrees

Undergraduate, Trinity College, Oxford, 1963-66. Major Scholar.

**B.A.**, First Class Honours, 1966; **M.A.**, 1985.

Research Student, Churchill College, Cambridge, 1966-69; **Ph.D.**, 1969.

Thesis title: Limit theorems and semigroups in probability theory.

Supervisor: D.G. Kendall. **Sc.D.**, Cambridge, 1996.

### Career

Lecturer, Westfield College, University of London, 1969-80.

Visiting Assistant Professor, University of Michigan, 1974-75.

Visiting Associate Professor, University of Illinois, 1975-76.

Reader in Mathematics, Westfield College, University of London, 1980-84.

Reader in Mathematics, Royal Holloway College, U. London, 1984-85.

Professor of Mathematics, Royal Holloway and Bedford New College, U. London, 1985-95.

Visiting Professor, Iowa State University, Spring Semester, 1990.

Professor of Statistics, Birkbeck College, University of London, 1995-99.

Professor of Statistics and Stochastic Modelling, Brunel University, 2000-3.

Professor, Department of Probability and Statistics, University of Sheffield, 2003-6.

Retired, 2006.

Senior Research Investigator, Mathematics Dept., Imperial College London, 2006-23.

Visiting Professor: Mathematics Department, London School of Economics, 2007-24; City U., 2009-12; Liverpool U., 2012-19.

### **Seventieth Birthday Conference and Festschrift**

Seventieth Birthday Conference:

Limit Theorems in Probability, Imperial College, 23-26 March 2015 (org. C. M. Goldie, R. Kiesel and A. Mijatović)

<http://wwwf.imperial.ac.uk/~amijatov/IP/LimitTheorems/LTP.html>.

Festschrift:

[PANT] Probability, Analysis and Number Theory (ed. C. M. Goldie and A. Mijatović), *Advances in Applied Probability* Special Volume **48A** (2016).

ISBN 978-0-902016-10-1; also available online:

<http://journals.cambridge.org/action/displayJournal?jid=APR#>.

### **Editorial work**

Book Reviews Editor, London Mathematical Society, 1981-90.

Editor, Journal of Applied Probability, 1987-88.

Co-ordinating Editor, J. Applied Probability/Advances in Applied Probability, 1988-2011.

Editorial Board, London Mathematical Society, 1992-98.

Associate Editor, J. Mathematical Analysis and Applications, 1993-98.

Associate Editor, Expositiones Mathematicae, 1993-2012.

Obituaries Editor, London Mathematical Society, 2005-16.

### **Membership of professional bodies**

London Mathematical Society, 1969-

Institute of Mathematical Statistics, 1974-

Royal Statistical Society, 1988-

Bernoulli Society, 2006-

Committee of Professors of Statistics, 1985-2003

EPSRC Mathematics College, EPSRC Mathematics Panel, 1997-2006.

### **Seminar organization**      Co-organizer:

University of London Probability Seminar, 1976-99.

Analysis and Number Theory Seminar, RHC, 1985-95.

Joint Statistics Seminar, RHC/Surrey, 1985-89, Reading/RHC/Surrey, 1989-95, Brunel/Reading/RHC/Surrey 2003.

### **Conference organization**

LMS Durham Symposium : Stochastic Analysis, 1990 (with M.T. Barlow; Proceedings, [BB ] below, MR92m:60005).

**External examiner**

Bedford College, University of London, 1983-85.  
University College, University of London, 1986-89.  
University of Cambridge (Mathematical Tripos Part IB), 1988-89.  
University of Surrey, Statistics, 1987-89, Pure Mathematics, 1990-92.  
King's College, University of London, 1990-93.  
Open University (M343/L Applied Probability), 1994-2000.  
St. Mary's College, Strawberry Hill (University of Surrey), 1994-99.  
Cardiff, Statistics, 1995-98.  
Brunel University, Statistics, 1996-99.  
London School of Economics, Mathematics, 1997-99.  
University of Cambridge (Mathematical Tripos Part II), 1999-2001.  
University of Warwick, Mathematics, 2000-2002.  
King's College, London, MSc in Financial Mathematics, 2000-2004.  
Open University, Economics & Mathematical Sciences, 2001-5.  
Heriot-Watt University, MSc in Financial Mathematics, 2003-7.  
University of Warwick, MSc in Financial Mathematics, 2004-7.  
Oxford University, MSc in Financial Mathematics, 2007-9.  
Sussex University, Mathematics, 2007-10.  
Leeds University, MSc in Financial Mathematics, 2009-12.  
Leicester University, MSc in Financial Mathematics, 2013-16.  
King's College London, MSc, Financial Mathematics, 2016-19 .

**Internal duties** Major administrative tasks:

Westfield: Departmental Supervisor, 1977-80 (responsible for curriculum, student registration etc.)  
Royal Holloway: Research Committee, 1987-90.  
Birkbeck: Departmental Chairman, 1995-99.  
Brunel: Projects Coordinator, Monitoring & Review Sub-Comm., 2001-03.  
Sheffield: Cluster Leader, Probability Theory; PhD Admissions Officer;  
Departmental Coordinator for Pay & Reward.

**University of London duties**

Chairman, Board of Studies in Mathematics, University of London, 1991-93  
(Deputy Chairman, 1990, 1994).  
Director, Centre for Mathematics, University of London, 1991-93.  
Deputy Chairman, Subject Panel in Mathematics, U. London, 1995-98.

Subject Area Board B (Physical and Mathematical Sciences), 1997-99.  
Specialist Panel in Mathematics (advising on PhD examiners), 1996-99.

**Teaching experience** Courses taught (150 in 50 years, 1969-2019; 104 in 37 years pre-retirement + 46 in 13 years post-retirement):

**Statistics:**  $37\frac{1}{2}$ ,  $30 + 7\frac{1}{2}$  (2nd year, general: 7, 2nd year, inference: 4; 2nd year, regression: 2; 3rd year, general: 7, 3rd year, inference: 3; 3rd year, regression, 2; 3rd year, time series: 1; 3rd year/MSc: distribution theory,  $2 \times \frac{1}{2}$ , inference,  $2 \times \frac{1}{2}$ , multivariate analysis,  $2 \times \frac{1}{2}$ , Bayesian statistics and decision theory,  $2 \times \frac{1}{2}$ ); MSc Stat. methods for finance  $7\frac{1}{2}$  (plus workstation sessions: Birkbeck, MSc1 (MINITAB), MSc2 (S-Plus); Sheffield, Level 2 (S-Plus)).

**Probability:**  $36\frac{1}{2}$ ,  $28 + 8\frac{1}{2}$  (1st or 2nd year: 17; 3rd year: 7; postgraduate: 4; MSc  $8\frac{1}{2}$ ).

**Analysis:** 29,  $21 + 8$  (1st year: 3; 2nd year: real, 6; complex,  $4 + 4$ ; 3rd year: measure theory, 3; functional analysis,  $5 +$  analytic number theory, 4).

**Mathematical Finance:** 18,  $4+14$  (Black-Scholes  $4+11$ , interest rates 3).

**General:** 16,  $12 + 4$  (algebra, calculus, differential equations, methods).

**History of Mathematics:** 10,  $6 + 4$ .

**Numerical Analysis:** 3 (3rd year).

**Extra-curricular:** Advanced Mathematical Finance (with Dr Rüdiger Kiesel), 6 weeks, Birkbeck College, Autumn 1997 (for City financial practitioners). Probability models for stochastic processes with independent increments (2). Ten-lecture RSS instructional course for PhD students in statistics, Nuffield College, Oxford, 23-27 September 2002, Wolfson Court, Cambridge, 20-24 September 2004.

Projects supervised: Birkbeck, MSc: 4; Brunel, BSc: 12 (5 statistics: athletics times, 3 statistics: other sports, 4 financial statistics); Sheffield, MSc: 6. *London Taught Course Centre*, Measure-theoretic probability (11) (10 h), (2008-19).

#### **Invited speaker at international (or major national) conferences**

August 1972 : 2nd Conference, Stochastic Proc. Applications, Leuven

August 1973 : 3rd Conference, Stochastic Proc. Applications, Sheffield

June 1975 : 5th Conference, Stoch. Proc. Applications, Maryland

August 1976 : Institute of Mathematical Statistics, Atlanta

July 1979 : Aspects of Contemporary Complex Analysis, Durham

Nov. 1980 : 9th Netherlands-Belgium Probab. Statistics Meeting, Lunteren

September 1982 : Session Organizer (Distribution Theory), 10th European Meeting of Statisticians, Palermo  
 November 1982 : Sequentialverfahren und Erneuerungstheorie, Oberwolfach  
 March 1984 : 36th British Mathematical Colloquium, Bristol  
 April 1985 : Dependence in Probability and Statistics, Oberwolfach  
 January 1988 : Probability in Groups IX, Oberwolfach  
 June 1988 : Almost Everywhere Convergence I, Ohio State University  
 March 1989 : Mathematische Stochastik, Oberwolfach  
 June 1989 : Karamata Memorial Meeting, Kupari/Dubrovnik  
 October 1989 : Almost Everywhere Convergence II, Northwestern Univ.  
 March 1991: Rényi Memorial Meeting, Budapest  
 March 1992 : Mathematische Stochastik, Oberwolfach  
 March 1993 : Clifford Lectures, Tulane University, New Orleans  
 August 1993: Random Spatial Processes, Isaac Newton IMS, Cambridge  
 Dec. 1993 : Philip Holgate Memorial Meeting, Birkbeck College, London  
 January 1994 : Aart Stam Retirement Meeting, Groningen  
 August 1996: Session Organiser (History of Probability and Statistics), 4th World Congress of the Bernoulli Society, Vienna  
 June 1997: Alexander Peyerimhoff Memorial Meeting, Ulm  
 July 1997: Miklos Csörgö Retirement Meeting, Ottawa  
 March 1998: Random sets and their applications, ICMS, Edinburgh  
 April 1998: Probability Workshop, Nottingham Trent University  
 July 1999: Stochastic Analysis, Durham (LMS Durham Symposium)  
 September 1999: History of Probability, Roskilde  
 July 2000: New directions in mathematical finance, King's College, London  
 Dec. 2001: Lévy processes and financial applications, Nuffield Coll., Oxford  
 April 2002: Risk 2002 Europe [Risk Magazine], Paris  
 May 2002: Stochastic processes and analysis, Sussex  
 January 2003: Jaap Korevaar 80th Birthday Meeting, Amsterdam  
 September 2003: Quant '03 [IIR Ltd], London  
 April 2004: Paris V: History of Probability (Journée Bru)  
 May 2004: J. L. Teugels Retirement Meeting, Leuven.  
 January 2005: Second Bachelier Colloquium, Métabief, France.  
 January 2005: Fourth Symposium on Lévy Processes, Manchester.  
 September 2005: Workshop on Financial Modelling, Ulm.  
 July 2008: International Workshop on Applied Probability, Compiègne.  
 July 2009: Statistical inference for Lévy processes, Eindhoven.  
 May 2010: Financial Derivatives & Risk Management, Fields Inst., Toronto.

June 2010: Marcinkiewicz Centenary Meeting, Poznan, Poland.  
 July 2010: Orthogonal polynomials and stochastic processes, Warwick.  
 December 2010: Computation and Financial Econometrics, London.  
 May 2011: Noel Veraverbeke Retirement Meeting, Hasselt.  
 August 2011: Stochastic methods in financial markets, Ljubljana.  
 September 2011: Markov and semi-Markov processes, Thessaloniki.  
 December 2011: Paul Lévy Memorial Meeting, Paris.  
 June 2012: Gnedenko Centenary Meeting, Moscow State University.  
 August 2012: Brussels Summer School in Math., U. Libre de Bruxelles.  
 September 2012: Royal Statistical Society International Conference, Telford.  
 April 2013: British Applied Mathematics Colloquium, Leeds.  
 August 2013: Claudia Klüppelberg 60 Fest, Braunschweig.  
 August 2013: Second Eurasian Mathematical Congress, Sarajevo.  
 Oct. 2014: On time. A Synposium on Time, Imperial College.  
 March 2017: Uli Stadtmüller Retirement Meeting, Ulm.  
 April 2017: International Conf. Official Statistics, Sarajevo (Keynote speaker).  
 July 2017: First Conf. Mathematical Financial Economics, Manchester.  
 July 2017: Durham Symposium on Stochastic Analysis.  
 Sept. 2017: Workshop in Honour of Peter Brockwell and Ross Maller, Ulm.  
 June 2018: Larry Shepp Memorial Meeting, Rice U., Houston.  
 July 2019: 11th Extreme Value Analysis Meeting, Zagreb.  
 August 2019: Stochastic Analysis Meeting, Risør, Norway.  
 May, 2021: Chebyshev 200 Meeting (online; Moscow).

In addition I have made many invited visits to (and given talks at) universities abroad, including USA, Germany (particularly Ulm – where I am a Visiting Professor, see under Teaching), Belgium (particularly Leuven), Netherlands (U. Amsterdam, Free U. Amsterdam), France (Rennes, Paris-VI), Switzerland (ETH - Zürich), Japan (Hokkaido, Hiroshima, Keio, Ochanomizu, Kyoto, Tsukuba), Australia (ANU).

### **Other professional activities**

Reviewer, Mathematical Reviews, 1970- [330 reviews]

Refereeing: many journals; SERC/EPSRC, NSF (USA), NRC (Canada), FWF (Austria).

Seminars given : hour talks 286; short contributed talks 19.

Ph.D. theses examined: UK, 60 (London 28: IC 10, LSE 7, UCL 4, Birkbeck 2, QMC, KCL, Chelsea, Westfield; Cambridge 10, Sheffield 6, Manchester 4, Oxford 3, City U. 2; Nottingham, Aberystwyth, St Andrews, NTU, Portsmouth, Brunel/Henley, Huddersfield);

overseas, 11 (KU Leuven 7, TU München, Ulm, U Natal/Durban, Strathmore U., Nairobi), + 8 Habilitationsschriften (Ulm 2, Essen, ETH-Zürich, Osnabrück, Eichstätt, Rennes, Paris-VI).

SERC grants obtained : Visiting Fellowships for

Dr. P. Embrechts, Westfield, 1979-80,

Professor P.E. Greenwood, RHBNC, May-August 1988,

Professor A.N. Shiryaev, RHBNC, May-August 1988;

LMS Durham Symposium on Stochastic Analysis, July 1990 (£ 24,180).

PhDs supervised:

1. Charles M. Goldie, Ph.D. (External), 1983 : On records and related topics in probability theory.

2. Bruce Dunham, 1995: Fluctuation theory for Markov chains.

3. Ulrich M. Hirth, 1997 (with Paul Ressel, Eichstätt): GEM distribution, Poisson approximation and exchangeable random partitions.

4. John M. Fry, 2007 (with D. B. Applebaum): The mathematics of financial crashes.

5. A. John Crosby, 2016 (with M. H. A. Davis), Pricing and risk theory in incomplete markets.

6. Pierre M. Blacque-Florentin, 2016 (with Rama Cont), Some infinite-dimensional topics in probability and statistics.

7. Tasmin L. Symons, 2019, Aspects of positive definiteness and Gaussian processes on Planet Earth.

8. Killian Martin-Horgassan, 2018-.

London Mathematical Society Publications Committee, 1980-90.

London Mathematical Society Library Committee, 2002-

I have advised on many book proposals for publishers: Springer, CUP, OUP, Princeton UP, Wiley, Chapman & Hall etc. I have sat on many SERC/EPSRC panels.

## PUBLICATIONS

### BOOKS

**BGT** (with C.M. Goldie and J.L. Teugels): *Regular Variation*. Encyclopaedia of Mathematics and its Applications **27**, Cambridge University Press, 1987, xix + 491 p, MR0898871 (88i:26004, R. A. Maller); 2nd ed., p/b, 1989, MR1015093 (90i:26003).

**BB** (with M.T. Barlow, editors): *Stochastic Analysis* (Proceedings of the

Durham Symposium on Stochastic Analysis, 1990). LMS Lecture Notes 167, CUP, 1991 (MR 92m:60005).

**BK** (with Rüdiger Kiesel): *Risk-neutral Valuation: Pricing and Hedging of Financial Derivatives*. Springer Series in Finance, 1998 (2nd corrected printing, 2000), ix + 296 p, ISBN 1852330015, MR1667526 (2000a:91057, Martin Schweizer); second edition, 2004, MR2057475 (2004m:91001), reprinted 2005.

**BE** (with I. V. Evstigneev, editors): Cindy Greenwood Festschrift, *Stochastics* **80** No. 2,3 (2008), MR2402156.

**BG** (with C. M. Goldie, editors): *Probability and Mathematical Genetics: Papers in Honour of Sir John Kingman*. LMS Lecture Notes 378, CUP, 2010, MR2744147.

**BF** (with J. M. Fry): *Regression*. SUMS (Springer Undergraduate Mathematics Series), 2010, MR2724817 (2011i:62002).

*In preparation:*

**BO** (with A. J. Ostaszewski): *Category and measure*. Cambridge Tracts in Math., CUP.

## PAPERS

[1] (with J.M. Hammersley): On a conjecture of Rademacher, Dickson and Plotkin. *J. Combinatorial Theory* **3** (1967), 182-190, MR0213967 (**35** #4819, H. S. M. Coxeter).

[2] Limit theorems for occupation-times of Markov processes. *Z. Wahrscheinlichkeitstheorie verw. Geb.* **17** (1971), 1-22, MR0281255 (**43** #6974, J. F. C. Kingman).

[3] Factorisation theory and domains of attraction for generalised convolution algebras. *Proc. London Math. Soc.* (3) **23** (1971), 16-30, MR0300316 (**45** #9362, H. Heyer).

[4] Limit theorems for regenerative phenomena, recurrent events and renewal theory. *Z. Wahrscheinlichkeitstheorie verw. Geb.* **21** (1972), 20-44, MR0353459 (**50** #5942, H. Kesten).

[5] Random walk on spheres. *Z. Wahrscheinlichkeitstheorie verw. Geb.* **22** (1972), 169-192, MR0305485 (**46** #4615, R. Azencott).

[6] Tauberian theorems for integral transforms of Hankel type. *J. London Math. Soc.* (2) **5** (1972), 493-503, MR0435748 (**55** #8705).

[7] Integral representations for ultraspherical polynomials. *J. London Math. Soc.* (2) **6** (1972), 1-11, MR0310310 (**46** #9411, Mary L. Boas).

[8] Limit theorems for a class of Markov processes: some thoughts on a post-



- card from Kingman. *Stochastic Analysis* (Rollo Davidson Memorial Volume, ed. E.F. Harding & D.G. Kendall, Wiley, 1973), 266-293, MR0362504 (**50** #14,944, Joseph Horowitz).
- [9] Positive definite functions on spheres. *Proc. Cambridge Phil. Soc.* **73** (1973), 145-156, MR0339308 (**49** #4067, R. A. Gangolli).
- [10] Maxima of sums of random variables and suprema of stable processes. *Z. Wahrscheinlichkeitstheorie verw. Geb.* **26** (1973), 273-296, MR0415780 (**54** #3859, N. Veraverbeke).
- [11] Limit theorems in fluctuation theory. *Adv. Appl. Probab.* **5** (1973), 554-569, MR0348843 (**50** #1338, C. C. Heyde).
- [12/13] (with R.A. Doney): Asymptotic properties of super-critical branching processes.
- I: The Galton-Watson process. *Adv. Appl. Probab.* **6** (1974), 711-731, MR0362525 (**50** #14,965, E. Seneta).
- II: Crump-Mode and Jirina processes. *Adv. Appl. Probab.* **7** (1975), 66-82, MR0378125 (**51** #14,294, E. Seneta).
- [14] (with J.L. Teugels): Duality for regularly varying functions. *Quarterly J. Math.* (3) **26** (1975), 333-353, MR0385026 (**52** #5896, J. Galambos).
- [15] Fluctuation theory in continuous time. *Adv. Appl. Probab.* **7** (1975), 705-766, MR0386027 (**52** #6886, N. Veraverbeke).
- [16] Continuous branching processes and spectral positivity. *Stochastic Processes and Applications* **4** (1976), 217-242, MR0410961 (**53** #14,701, E. Seneta).
- [17] (with R. Askey): Gaussian processes on compact symmetric spaces. *Z. Wahrscheinlichkeitstheorie verw. Geb.* **37** (1976), 127-143, MR0423000 (**54** #10,984, Jacques Faraut).
- [18] Tauberian theorems for Jacobi series. *Proc. London Math. Soc.* (3) **36** (1978), 285-309, MR0620813 (**58** #29,795, S. M. Mazhar).
- [19] Integrability theorems for convolutions. *J. London Math. Soc.* (2) **18** (1978), 502-510, MR0518235 (81g:40002, Kusum Soni).
- [20] (with J.L. Teugels): Tauberian theorems and regular variation. *Nieuw Arch. Wiskunde* (3) **27** (1979), 153-186, MR0535570 (80g:40006, E. Seneta).
- [21] Integrability theorems for Jacobi series. *Publ. Inst. Math. Belgrade* **26** (40) (1979), 45-56, MR0572329 (81j:42044, S. M. Mazhar).
- [22] (with J.L. Teugels): Mercerian and Tauberian theorems for differences. *Math. Z.* **170** (1980), 247-262, MR0564204 (81c:40011, William T. Sledd).
- [23] Wiener-Hopf and related methods in probability. *Aspects of Contemporary Complex Analysis* (ed. D.A. Brannan and J.G. Clunie, Academic Press,

- 1980), 369-375, MR0623478 (82j:60136, David J. Emery).
- [24] Tauberian theorems and the central limit theorem. *Ann. Probab.* **9** (1981), 221-231, MR0606985 (82f:40010, H. Kesten).
- [25] (with J.L. Teugels): Conditions implying domains of attraction. *Proc. Sixth Conf. Probab. Th.* (Brasov, 1979), 23-24. Ed. Acad. R.S. Roumaine, Bucharest, 1981, MR0633913 (84h:60036, R. A. Maller).
- [26] (with C.M. Goldie): Probabilistic and deterministic averaging. *Trans. Amer. Math. Soc.* **269** (1982), 453-480, MR0637702 (83c:60044, Allan Gut).
- [27/8] (with C.M. Goldie): Extensions of regular variation.
- I: Uniformity and quantifiers. *Proc. London Math. Soc.* (3) **44** (1982), 473-496, MR0656246 (83m:26004a, S. Aljančić).
- II: Representations and indices. *Proc. London Math. Soc.* (3) **44** (1982), 497-534, MR0656247 (83m:26004b, S. Aljančić).
- [29] (with J. Hawkes): Some limit theorems for occupation times. *Probability, Statistics & Analysis* (D.G. Kendall Festschrift, ed. J.F.C. Kingman & G.E.H. Reuter) 46-62, Cambridge Univ. Press, 1983, MR0696020 (84f:60032, A. G. Pakes).
- [30] (with C.M. Goldie): On one-sided Tauberian conditions. *Analysis* **3** (1983), 159-188, MR0756113 (85m:40004 Y. Sitaraman).
- [31] On a theorem of Klosowska about generalised convolution. *Colloq. Math.* **48** (1984), 117-125, MR0750763 (85m:60025, Jozef L. Teugels).
- [32] On Euler and Borel summability. *J. London Math. Soc.* (2) **29** (1984), 141-146, MR0734999 (85k:40010, E. Smet).
- [33] On Valiron and circle convergence. *Math. Z.* **186** (1984), 273-286, MR0741307 (86g:40008, Amnon Jakimovski).
- [34] Tauberian theorems for summability methods of random-walk type. *J. London Math. Soc.* (2) **30** (1984), 281-287, MR0771423 (86f:60085, E. Csáki).
- [35] (with M. Maejima): Summability methods and almost-sure convergence. *Z. Wahrsch. verw. Geb.* **68** (1985), 383-392, MR0771473 (86f:60037, Paul Embrechts).
- [36] On Tauberian theorems in probability theory. *Nieuw Arch. Wiskunde* (4) **3** (1985), 157-166, 0811594 (MR 87d:40011, E. Omey).
- [37] (with G. Tenenbaum): Riesz and Valiron means and fractional moments. *Math. Proc. Cambridge Phil. Soc.* **99** (1986), 143-149, MR0809509 (86m:40011, E. Omey).
- [38] Variants on the law of the iterated logarithm. *Bull. London Math. Soc.* **18** (1986), 433-467, MR0847984 (87k:60087, R. J. Tomkins).

- [39] Summability methods and dependent strong laws. *Dependence in Probability and Statistics* (ed. E. Eberlein & M. Taqqu) 291-300, Birkhäuser, 1986 (MR 88k:60057, Makoto Maejima).
- [40] Extensions of the strong law. *Analytic and Geometric Stochastics* (ed. D.G. Kendall), 27-36. Supplement, Adv. Appl. Probability (G.E.H. Reuter Festschrift), 1986, MR0868505 (88m:60016, A. Bozorgnia).
- [41] (with R.A. Doney): On higher-dimensional analogues of the arc-sine law. *J. Appl. Probab.* **25** (1988), 120-131, MR0929510 (89g:60249, D. V. Gusak).
- [42] On the limit of a supercritical branching process. *J. Appl. Probab.* **25A** (1988), 215-228, MR0974583 (90a:60150, D. R. Grey).
- [43] (with C.M. Goldie): Riesz means and self-neglecting functions. *Math. Z.* **199** (1988), 443-454, MR0961822 (89i:60065, J. Steinebach).
- [44] Tauberian theorems for Jakimovski and Karamata-Stirling methods. *Mathematika* **35** (1988), 216-224, MR0986631 (90f:40006, M. S. Rangachari).
- [45] Tauberian theorems in probability theory. (Proceedings, Probability on Groups IX, Oberwolfach, 1988). *Lecture Notes in Math.* **1379** (1989), 6-20, MR1020518 (90m:40006, Aart J. Stam).
- [46] Moving averages. *Almost Everywhere Convergence I* (ed. G.A. Edgar & L. Sucheston) 131-144, Academic Press, 1989, MR1035241 (91c:60032, J. Steinebach).
- [47] The work of A.N. Kolmogorov on strong limit theorems. *Theory of Probability and Applications* **34** (1989), 129-139, MR0993958 (90f: 60060, P. Révész).
- [48] The work of A.N. Kolmogorov on probability, particularly limit theorems. Pages 51-58 of: A.N. Kolmogorov, Obituary by D.G. Kendall, *Bull. London Math. Soc.* **22** (1990), 31-100, MR1026769 (91i:01089).
- [49] (with U. Stadtmüller): Jakimovski methods and almost-sure convergence. *Disorder in Physical Systems* (J.M. Hammersley Festschrift, ed. G.R. Grimmett & D.J.A. Welsh) 5-18, Oxford University Press, 1990, MR1064552 (91i:60082, Makoto Maejima).
- [50] Regular variation in probability theory. *Publ. Inst. Math. Beograd (NS)* **48** (62) (1990), 169-180, MR1105151 (92e:60040, E. Omey).
- [51] (with W.J. Luther): Ein Taubersche Restgliedsatz für Jacobi-Reihen. *Archiv für Mathematik* **57** (1991), 53-60, MR1111115 (92i:40007, Paul Embrechts).
- [52] Fluctuation theory for the Ehrenfest urn. *Adv. Appl. Probab.* **23** (1991), 598-611, MR1122877 (92h:60013, R. Pemantle).

- [53] (with L.C.G. Rogers): Summability methods and almost-sure convergence. *Almost Everywhere Convergence II* (ed. A. Bellow & R.L. Jones), Academic Press (1991) 69-83, MR1131783 (93b:60062, U. Stadtmüller).
- [54] (with J.D. Biggins): Near-constancy phenomena for branching processes. *Math. Proc. Cambridge Phil. Soc.* **110** (1991), 545-558, MR1120488 (93d:60136, M. I. Goldstein).
- [55] The work of Alfred Rényi: some aspects in probability and number theory. *Studia. Sci. Math. Hungar.* **26** (1991), 165-183, MR1180489 (93k:01063, U. Krengel).
- [56] Obituary: G.E.H. Reuter. *J. Appl. Probab.* **29** (1992), 754-757, MR1174451 (93g:01060).
- [57] (with J.D. Biggins): Large deviations in the supercritical branching process. *Adv. Appl. Probab.* **25** (1993), 759-772, MR1241927 (94i:60101, E. Seneta).
- [58] The work of Lajos Takács in probability theory. *J. Appl. Probab.* **31A** (1994), 29-39 (Studies in Applied Probability, Lajos Takács Festschrift, ed. J. Gani & J. Galambos, Appl. Probab. Trust), MR1274715 (95h:60002, Pierre Crépel).
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