

## **Richard M. Timoney**

### **Degrees & Distinctions**

<b>1973</b>	B.Sc. (Hons.) in Mathematical Sciences.
<b>1974</b>	M.Sc. (Hons.) in Mathematical Sciences
<b>1978</b>	Ph.D. from University of Illinois
<b>1983</b>	M.A. (jure officii), University of Dublin.
<b>1997</b>	Awarded the “Medal of Merit for the Development of the University” by Nicholas Copernicus University, Toruń, Poland.

### **Employment**

<b>1974–78</b>	Teaching Assistant at University of Illinois.
<b>1978–80</b>	Vaclav Hlavaty Research Assistant Professor at Indiana University, Bloomington.
<b>1980–90</b>	Lecturer in Mathematics at Trinity College, Dublin.
<b>1983–91</b>	Tutor at Trinity College, Dublin.
<b>1984–85</b>	Visiting Assistant Professor, University of North Carolina, Chapel Hill.
<b>1989–</b>	Fellow of Trinity College, Dublin (Senior Fellow 2015–).
<b>1990–2008</b>	Senior Lecturer in Mathematics at Trinity College, Dublin.
<b>1997–2002</b>	Chairman, School Committee, School of Mathematics
<b>1999–2002</b>	Head, Department of Pure & Applied Mathematics
<b>2005–2008</b>	Director of Teaching & Learning (Postgraduate), School of Mathematics
<b>2008–</b>	Professor in Mathematics at Trinity College, Dublin.
<b>2008–2010</b>	Director of Teaching & Learning (Undergraduate), School of Mathematics
<b>2016–2018</b>	Junior Proctor at Trinity College, Dublin.
<b>2016–</b>	Member of the College Board, Trinity College, Dublin.

### **Professional Activities**

<b>1970–74</b>	Student at University College, Dublin.
<b>1974</b>	Travelling Studentship of the National University of Ireland.
<b>1974–78</b>	Student at University of Illinois, Urbana.
<b>1977–78</b>	University of Illinois Graduate Fellowship.
<b>1982–87</b>	Secretary, Irish Mathematical Society.
<b>3/1983</b>	Visited Warsaw under the auspices of a Royal Irish Academy/ Polish Academy of Sciences exchange agreement.
<b>9/1983</b>	Visited the Open University, Milton Keynes, England.
<b>3/1986</b>	Visited Paris under the auspices of an NBST/CNRS exchange agreement.
<b>6/1987</b>	Visited the University of Santiago de Compostella, Spain.
<b>1988–89</b>	Vice President, Irish Mathematical Society.
<b>9/1990</b>	Visited the Mittag-Leffler Institute, Sweden during the special year on ‘Operator theory and complex analysis’.
<b>1990–91</b>	President, Irish Mathematical Society.
<b>9/1991</b>	Visited the University of Toronto, Canada.
<b>1991–96</b>	Member of EUROMATH Project Committee.
<b>1991–2000</b>	Member of Committee of Management, European Mathematical Trust.
<b>1998</b>	Organising committee for Joint meeting of the Irish Mathematical Society and the London Mathematical Society, May 22–23.
<b>1999</b>	Organiser for 12th September Meeting of the Irish Mathematical Society, September 2–3.
<b>9–12/2002</b>	Visited University of Edinburgh
<b>2004</b>	Organiser for conference ‘Recent advances in operator-related function theory’ (TCD Aug 4–8). Supported in part by National Science Foundation of the US.
<b>2006–</b>	Associate Editor, Journal of Mathematical Analysis and Applications
<b>2008</b>	Member of Scientific Committee for conference ‘Operator Theory and Operator Algebras in Cork, A Conference in Memory of Gerard J Murphy’ (7 – 9 May)
<b>2008–2018</b>	Subject Editor, Proceedings of the Edinburgh Mathematical Society
<b>2009–</b>	Associate Editor, Journal of Geometric Analysis

### Publications of Richard M. Timoney

1. *Bloch functions in several complex variables*, Ph.D. thesis, University of Illinois, 1978.
2. *A necessary and sufficient condition for Bloch functions*, Proceedings of the American Mathematical Society, **71** (1978), 263–266.
3. (with L. A. Rubel) *An extremal property of the Bloch space*, Proceedings of the American Mathematical Society, **75** (1979), 45–49.
4. *An example of a Bloch function*, International Journal of Mathematics and Mathematical Sciences, **2** (1979), 147–150.
5. *Bloch functions in several complex variables, I*, Bulletin of the London Mathematical Society, **12** (1980), 241–267.
6. *Bloch functions in several complex variables, II*, Journal für die reine und angewandte Mathematik, **319** (1980), 1–22.
7. (with G. Bennett and D. A. Stegenga) *Coefficients of Bloch and Lipschitz functions*, Illinois Journal of Mathematics, **25** (1981), 520–531.
8. *Maximal invariant spaces of analytic functions*, Indiana University Mathematical Journal, **31** (1982), 651–663.
9. (with T. Barton and S. Dineen) *Bounded Reinhardt domains in Banach spaces*, Compositio Mathematica, **59** (1986) 265–321.
10. *Reinhardt decompositions of operator matrix spaces*, (in “Report on the Dublin Matrix Theory Conference, March 1984”) Linear Algebra and its Applications, **68** (1985) 255–258.
11. (with S. Dineen and J.-P. Vigué) *Pseudodistances invariantes sur les domaines convexes d’un espace localement convexe*, Annali della Scuola Normale Superiore di Pisa, **12** (1985) 515–529.
12. (with T. Barton) *Weak\*-continuity of Jordan triple products and its applications*, Mathematica Scandinavica, **59** (1986) 177–191.
13. (with S. Dineen) *Irreducible domains in Banach spaces*, Israel Journal of Mathematics, **57** (1987) 327–346.

14. (with J. Cima) *The Dunford Pettis property for certain planar uniform algebras*, Michigan Mathematical Journal, **34** (1987) 99–104.
15. (with S. Dineen and M. Klimek) *Biholomorphic mappings and Banach function modules*, Journal für die reine und angewandte Mathematik, **387** (1988) 122–147.
16. *Weak\*-continuity of Jordan triple products and applications*, Seminaire d'Analyse Fonctionnelle Paris VI-VII 1985/1986/1987 pages 39–49, Publications Mathématiques de l'Université Paris VII.
17. *The Dunford-Pettis property for certain planar uniform algebras*, Seminaire d'Analyse Fonctionnelle Paris VI-VII 1985/1986/1987 pages 51–65, Publications Mathématiques de l'Université Paris VII.
18. (with S. Dineen) *The centroid of a  $JB^*$ -triple system*, Mathematica Scandinavica, **62**(1988) 327–342.
19. (with S. Dineen) *Absolute bases, tensor products and a theorem of Bohr*, Studia Mathematica, **94** (1989) 227–234.
20. *Natural function spaces*, Journal of the London Mathematical Society, (2) **41** (1990) 78–88.
21. (with S. Dineen) *The algebraic metric of Harris on  $JB^*$ -triple systems*, Proceedings of the Royal Irish Academy **90A** (1990) 83–87.
22. (with S. Dineen) *On a problem of H. Bohr*, Bulletin de la Société Royale des Sciences de Liège **60** (1991) 401–404.
23. (with S. Dineen) *Extremal problems for the Schwarz lemma*, Arkiv för matematik **30** (1992) 61–81. 1989.
24. (with S. Dineen) *Complex geodesics on convex domains*, in *Progress in Functional Analysis*, Amsterdam, North-Holland, 1992, 333–365.
25. (with S. Dineen, J. F. Feinstein and A. G. O'Farrell) *A fixed-point theorem for holomorphic maps*, Proceedings of the Royal Irish Academy **94A** (1994) 77–84.
26. *The construction of an interactive LaTeX translator for mathematical formulae*, Euromath Bulletin **1** No. 2 (1994) 103–110.

27. *Euromath system: alphabets and fonts*, J. Computational Technologies, **2** No. 3 (1997) 73–79.
28. *A note on positivity of elementary operators*, Bulletin of the London Mathematical Society, **32** (2000) 229–234.
29. *An internal characterisation of complete positivity for elementary operators*, Proceedings of the Edinburgh Mathematical Society **45** (2002) 285–300.
30. *Norms of elementary operators*, Bulletin of the Irish Mathematical Society **46** (2001) 13–17.
31. *Computing the norms of elementary operators*, Illinois Journal of Mathematics **47** (2003), 1207–1226.
32. *Norms and CB norms of Jordan elementary operators*, Bulletin des Sciences Mathématiques **127** (2003) 597–609.
33. (with R. Archbold & D. Somerset) *On the central Haagerup tensor product and completely bounded mappings of a  $C^*$ -algebra*, Journal of Functional Analysis **226** (2005) 406–428.
34. *Some formulae for norms of elementary operators*, Journal of Operator Theory **57** (2007) 121–145. (<http://front.math.ucdavis.edu/math.OA/0509491>)
35. (with B. Yan) *Positive solutions for nonlinear singular boundary value problems on the half line*, International Journal of Mathematical Analysis, **1** (2007) 1189–1208.
36. (with R. Archbold & D. Somerset) *Completely bounded mappings and simplicial complex structure in the primitive ideal space of a  $C^*$ -algebra*, Transactions of the American Mathematical Society **361** (2009) 1397–1427.
37. (with R. Archbold & D. Somerset) *Factorial states, upper multiplicity and norms of elementary operators*, Journal of the London Mathematical Society **78** (2008) 707–722.
38. (with John E. McCarthy) *Polynomial inequalities for non-commuting operators*, Electron. J. Linear Algebra **20** (2010) 506–518.

39. (with D. Kitson) *Operator ranges and spaceability*, J. Math. Anal. Appl. **378** (2011) 680–686.
40. (with L. J. Bunce and B. Feely) *Operator space structure of  $JC^*$ -triples and TROs, I*, Math. Z. **270** (2012) 961–982.
41. *Computation versus formulae for norms of elementary operators*, in Elementary operators and their applications, *Oper. Theory Adv. Appl.*, vol. 212, Birkhäuser/Springer Basel AG, Basel (2011) pp. 133–150.
42. (with L. J. Bunce) *On the operator space structure of Hilbert spaces*, Bull. Lond. Math. Soc. **43** (2011) 1205–1218.
43. (with Rupert H. Levene) *Completely bounded norms of right module maps*, Linear Algebra Appl. **436** (2012) 1406–1424. Corrigendum **505** (2016) 387–389.
44. (with L. J. Bunce) *On the universal TRO of a  $JC^*$ -triple, ideals and tensor products*, Q. J. Math. **64** (2013) 327–340.
45. (with L. J. Bunce) *Universally reversible  $JC^*$ -triples and operator spaces*, J. Lond. Math. Soc. (2) **88** (2013) 271–293.
46. (with John E. McCarthy) *Non-commutative automorphisms of bounded non-commutative domains*, Proc. Roy. Soc. Edinburgh Sect. A **146** (2016) 1037–1045.
47. (with Ilja Gogić) *The closure of two-sided multiplications on  $C^*$ -algebras and phantom line bundles*, International Mathematics Research Notices **2018** (Issue 2, 23 January 2018) 607–640.

### Expository articles

1. *Is Nevanlinna theory dead? — an essay*, Irish Mathematical Society Newsletter, no. 7 (March 1983), 60–66.
2. *Projects in Mathematics*, Irish Mathematics Teachers Association Newsletter, no. 59 (October 1985) 10–15.
3. (with A. Jakubowski, D. Simson, T. M. Wolniewicz and H. Lenzing) *An East-West cooperation project*, Euromath Bulletin **1** No. 2 (1994) 111–115.

4. (with H. Lenzing and B. von Sydow) *Preparing for the future, the new Euromath system*, Euromath Bulletin **2** No. 1 (1996), 19–26.
5. (with M. Gorecka and T. M. Wolniewicz) *The Euromath interface to X.500 directory services*, Euromath Bulletin **2** No. 1 (1996), 27–30.
6. *Pisier's operator Hilbert space*, Technical report TCDMATH 97-02 (1997).  
[http://www.maths.tcd.ie/report\\_series](http://www.maths.tcd.ie/report_series)
7. *Style sheet languages and mathematical material*, paper presented at the workshop “Electronic Publishing Systems for Science and Education” held at Pereslavl-Zalessky, Russia, May 12-14, 1998. [http://www.botik.ru/PSI/EmNet\\_NIS/transactions/timoney/timoney.html](http://www.botik.ru/PSI/EmNet_NIS/transactions/timoney/timoney.html)

### Edited

1. *Recent Advances in Operator-Related Function Theory*, Alec L. Matheson, Lamar University, Michael I. Stessin, State University of New York (SUNY), and Richard M. Timoney, Trinity College, **Editors** American Mathematical Society, 2006, 214 pp., Softcover, ISBN 0-8218-3925-X. (Series: Contemporary Mathematics. CONM/393)  
<http://www.ams.org/bookstore?fn=20&arg1=conmseries&item=CONM-393>

### Obituaries

1. *Obituary: T. Trevor West 1938–2012*, Bulletin of the London Mathematical Society **45** (6) (2013) 1331-1338
2. (with Robin E. Harte, Finbarr Holland, Lothrop Mittenthal and Roger Smyth) *Some Recollections of Trevor West MRIA*, Mathematical Proceedings of the Royal Irish Academy **113** (2013) iii-xx
3. *The Mathematician*, chapter in book Trevor West — The Bold Collegian, pages 79-90. Lilliput Press 2016.

### Theses supervised

1. Colum Watt, *Complex Sprays, Finsler Metrics and Horizontal Complex Curves*, Ph.D. (1996).

2. David Malone, *Fourier Analysis, Multiresolution Analysis, and Dilation Equations*, M.Sc. (1998).
3. Oliver Mason, *Group invariance of natural exponential families and reproducing kernel Hilbert spaces*, M.Sc. (1999).
4. David Malone, *Solutions to dilation equations*, Ph.D. (2000).
5. Bernard Keville, *Multidimensional second order generalised stochastic processes on locally compact groups*, Ph.D. (2004).
6. John (Al) Matthews, *Jordan systems, bounded symmetric domains and associated group orbits with holomorphic and CR extension theory*, M.Sc. (2005).
7. Brian Feely, *Injective envelopes of operator spaces*, M.Sc. (2007).
8. Derek Kitson, *Methods of ascent and descent in multivariable spectral theory*, Ph.D. (2008).
9. Robert Pluta, *Ranges of bimodule projections and conditional expectations*, Ph.D. (2012).
10. Fionán Howard, *Douglas Algebras and their Maximal Ideal Spaces*, M.Sc. (2013).
11. David McConnell,  *$C_0(X)$ -structure in  $C^*$ -algebras, multiplier algebras and tensor products*, Ph.D. (2014).
12. James Boland, *The Herrero conditions on norm limits of hypercyclic operators*, Ph.D. (2016).



### **Grants**

1979–80	National Science Foundation research grant.
1991–94	TEMPUS grant (coordinator), ‘Toruń UNIX Centre’
1993–95	EOLAS Research grant ‘Complex Analysis on non-smooth domains’
1994–97	TEMPUS II project (partner), ‘Toruń Information Technology Initiative’
1994–96	OpenMATH Human Capital and Mobility Network (participant)
1997–2000	ESPRIT project (Associate Partner), ‘OpenMATH: Accessing and Using Mathematical Information Electronically’.
1998–2001	TEMPUS project (partner), ‘New Curricula in Mathematics and Computer Science’.
2005–2008	SFI RFP 2005 grant (PI), ‘Jordan and complex analytic methods for operator spaces’.
2011–2015	SFI 11/RFP/MTH3187 (PI), ‘Problems associated with bounded symmetric domains’.

### **Membership in scholarly organisations**

American Mathematical Society (1976– )  
 European Mathematical Society (1991– )  
 Irish Mathematical Society (1980– )  
 London Mathematical Society (1980– )