

EDWARD W. ODELL
BIOGRAPHICAL DATA

EDUCATION

Ph.D.	Massachusetts Institute of Technology	1975
B.A.	SUNY at Binghamton	1969

PROFESSIONAL EXPERIENCE

2009-	Associate Chair, Department of Mathematics
2005-	John T. Stuart III Centennial Professor of Mathematics
1990-	Professor, University of Texas at Austin
1981-1990	Associate Professor, University of Texas at Austin
1977-81	Assistant Professor, University of Texas at Austin
1975-77	Instructor, Yale University

PROFESSIONAL SOCIETIES

American Mathematical Society
Mathematical Association of America

AWARDS AND HONORARY SOCIETIES

1969-71	National Science Foundation Fellow
1969	Woodrow Wilson Fellow
1969	New York State Regents Graduate Fellow
1975-77	J. W. Gibbs Instructor
1982-83	President's Associates Teaching Fellow in Mathematics
1994-96	Louise and Joe B. Cook Professor of Mathematics
1998	College of Natural Sciences Teaching Award
2005	John T. Stuart III Centennial Professor

SELECTED INVITED LECTURES

Invited 45 minute talk at the International Congress of Mathematics, Zurich, August 1994.

Co-organizer of Convex Geometry and Geometric Functional Analysis program at MSRI, Berkeley, Spring 1996.

Main speaker (3 hour lectures) at "Analyse et Logique" conference, Mons, Belgium, August, 1997.

Five lectures on "Stability in Banach spaces", Cursos de Verano de la Universidad de Cantabria, Laredo, Spain, August 20-24, 2001.

Three invited lectures titled "Ramsey Methods in Banach spaces", at ICMS conference, Edinburgh, Scotland, March 2002.

Four lectures on "Ordinal indices in Banach spaces", Universidad de Cantabria, Laredo, Spain, August 25-28, 2003.

Plenary speaker at International conference dedicated to the 125th anniversary of Hans Hahn, Chernivtsi, Ukraine, June-July, 2004.

Main speaker (8 lectures) at mini-course on Banach spaces, Chern Institute of Mathematics, Nankai University, Tianjin, China, July 2007.

Main Speaker (3 lectures) at III International course of Mathematical Analysis in Andaluca, Huelva, Spain, September 2007.

RESEARCH SUPPORT

Continuous National Science Foundation support since 1976.

PUBLICATIONS

Articles

1. (with W. B. Johnson) *Subspaces of L_p which embed into l_p* , *Compositio Mathematica*, 28(1974), 37-49.
2. (with L. E. Dor) *Monotone bases in L_p* , *Pacific J. Math.*, 60(1975), 51-61.
3. (with H. P. Rosenthal) *A double-dual characterization of separable Banach spaces containing l_1* , *Israel J. Math.*, 20(1975), 375-384.
4. *On complemented subspaces of $(l_2)_p$* , *Israel J. Math.*, 23(1976), 353-367.
5. (with D. Alspach and P. Enflo) *On the structure of separable \mathcal{L}_p spaces ($1 < p < \infty$)*, *Studia Math.*, 60(1977), 79-90.
6. (with J. Hagler) *A Banach space not containing l_1 whose dual ball is not weak* sequentially compact*, *Illinois J. Math.*, 22(1978), 290-294.
7. *Applications of Ramsey theorems to Banach space theory*, *Notes In Banach Spaces*, Univ. of Texas Press, H. Elton Lacey, (ed.), Austin, 1980.
8. *A normalized weakly null sequence with no shrinking subsequence in a Banach space not containing l_1* , *Compositio Math.*, 41(1980), 287-295.
9. (with W. B. Johnson) *Subspaces and quotients of $l_p + l_2$ or X_p* , *Acta Mathematica*, 147(1981), 117-147.
10. (with J. Elton) *The unit ball of every infinite dimensional normed linear space contains a $(1 + \varepsilon)$ -separated sequence*, *Colloq. Math.*, 44(1981), 105-109.
11. (with J. Sternfeld) *A fixed point theorem in c_0* , *Pacific J. Math.*, 95(1981), 161-177.
12. (with R. Haydon and J. Sternfeld) *A fixed point theorem for a class of starshaped sets in c_0* , *Israel J. Math.*, 38(1981), 75-81.
13. *Remarks on the separable dual problem*, *Proceedings of Research Workshop on Banach Space Theory*, The University of Iowa, Bor-Luh Lin, (ed.), 1982, 129-138.
14. (with J. Elton, Pei-Kee Lin and S. Szarek) *Remarks on the fixed point problem for non-expansive mappings*, *Fixed Points and Nonexpansive Mappings*, *Contemporary Math.* 18, 1983, 87-120.
15. *On the types in Tsirelson's space*, *Longhorn Notes*, The University of Texas at Austin, 1983, 49-59.
16. (with P. G. Casazza) *Tsirelson's space and minimal subspaces*, *Longhorn Notes*, The University of Texas at Austin, 1983, 61-72.
17. *Best compact approximation of certain thin operators on L_p* , *Longhorn Notes*, The University of Texas at Austin, 1983-84, 185-192.
18. *On certain complemented subspaces of L_1 with the strong Schur property*, *Longhorn Notes*, The University of Texas at Austin, 1983-84, 177-184.
19. *A nonseparable Banach space not containing a subsymmetric basic sequence*, *Israel J. Math.*,

- 52(1985), 97-109.
20. (with H. Bang) *An operator from l_p into L_p ($1 < p < 2$) without a best compact approximant*, Longhorn Notes, The University of Texas at Austin, 1984-85, 55-62.
 21. (with H. Bang) *Isomorphic properties of the stopping time Banach space*, Longhorn Notes, The University of Texas at Austin, 1984-85, 63-82.
 22. *No subsymmetric subsequences*, Longhorn Notes University of Texas at Austin, 1984-85, 95-106.
 23. (with S. Argyros, R. Haydon and M. Levy) *On Banach spaces containing $l_1(\Gamma)$* , Longhorn Notes, The University of Texas at Austin, 1985-86, 151-162.
 24. (with R. Haydon and M. Levy) *On sequences without weak* convergent convex block subsequences*, Proc. Amer. Math. Soc., 100(1987), 94-98.
 25. (with H. Bang) *On the best compact approximation problem for operators between L_p -spaces*, J. Approximation Theory, 51(1987), 274-287
 26. (with D. Alspach) *Averaging weakly null sequences*, Functional Analysis, Springer-Verlag, LNM 1332 (1988), 126-144.
 27. (with S. Argyros and H. Rosenthal) *On certain convex subsets of c_0* , Springer-Verlag, LNM 1332 (1988), 80-111.
 28. (with C. Schumacher) *JH^* has the PCP*, Banach Space Theory, Contemporary Math. 85(1989), 387-403.
 29. (with S. Bellenot and R. Haydon) *Quasi-reflexive and tree spaces constructed in the spirit of R. C. James*, Banach Space Theory, Contemporary Math. 85 (1989), 19-43.
 30. (with H. Bang) *On the stopping time Banach space*, Oxford Quarterly Journal of Mathematics (2). 40(1989), 257-273.
 31. (with H. Knaust) *On c_0 sequences in Banach spaces*, Israel J. Math., 67(1989), 153-169.
 32. (with R. Haydon and H. P. Rosenthal) *On certain classes of Baire-1 functions with applications to Banach space theory*, Functional Analysis, Springer-Verlag LNM, 1470(1991), 1-35.
 33. (with H. Knaust) *Weakly null sequences with upper l_p estimates*, Functional Analysis, Springer-Verlag LNM, 1470(1991), 85-107.
 34. *On quotients of Banach spaces having shrinking unconditional bases*, Illinois J. Math., 36(1992), 681-695.
 35. *On Schreier unconditional sequences*, Banach Spaces, (ed. by W. B. Johnson and B.-L. Lin), Contemporary Math. 144, American Math. Soc., (1993)197-201.
 36. (with Th. Schlumprecht) *The distortion of Hilbert space*, GAFA 2(1993), 201-207.
 37. (with H. Rosenthal and Th. Schlumprecht) *On weakly null FDD's in Banach spaces*, Israel J. Math., 84(1993), 333-351.
 38. (with Th. Schlumprecht) *The distortion problem*, ACTA, 173 (1994), 259-281.
 39. (with Th. Schlumprecht) *On the richness of the set of P 's in Krivine's theorem*, Operator theory; Advances and Applications, 77(1995), 177-198.
 40. (with Th. Schlumprecht), *Distortion and stabilized structure in Banach spaces; New geometric phenomena for Banach and Hilbert spaces*, Proc. International Congress Math. in Zurich 1994, Birkhauser Verlag (1995), 955-965.
 41. (with N. Tomczak-Jaegermann and R. Wagner) *Proximity to ℓ_1 , and distortion in asymptotic*

- ℓ_1 spaces, *Funct. Anal.* 150(1997), 101–145.
42. (with Th. Schlumprecht) *A problem on spreading models*, *J. Funct. Anal.* 153(1998), 249–261.
 43. (with Th. Schlumprecht) *On asymptotic properties of Banach spaces under renormings*, *J. Amer. Math. Soc.* 11(1998), 175–188.
 44. (with R. Judd) *Concerning Bourgain's ℓ_1 index of a Banach space*, *Israel J. Math.* 108(1998), 145–171.
 45. (with G. Androulakis) *Distorting Mixed Tsirelson Spaces*, *Israel J. Math.* 109(1999), 125–149.
 46. (with H. Knaust and Th. Schlumprecht) *On asymptotic structure, the Szlenk index and UKK properties in Banach spaces*, *J. of Positivity* 3(1999), 173–199.
 47. (with Th. Schlumprecht) *A Banach space block finitely universal for monotone bases*, *Trans. A.M.S.* 352(1999), 1859–1888.
 48. (with Nicole Tomczak-Jaegermann) *On certain equivalent norms on Tsirelson's space*, *Illinois J. Math.* 44(2000), 51–71.
 49. (with D. Alspach) *L_p Spaces*, *Handbook of the Geometry of Banach spaces vol. 1*, editors W.B. Johnson and J. Lindenstrauss, Elsevier Science B.V. (2001), 123–159.
 50. *Stability in Banach spaces*, *Extracta Mathematicae* 17(2002), 1–43.
 51. (with Th. Schlumprecht) *Trees and Branches in Banach spaces*, *Trans. A.M.S.* 354(2002), 4085–4108.
 52. (with Th. Schlumprecht) *Distortion and Asymptotic structure*, *Handbook of the Geometry of Banach spaces, vol. 2*, editors W.B. Johnson and J. Lindenstrauss, Elsevier Science B.V. (2003), 1333–1360.
 53. (with L. Halbeisen) *On asymptotic models in Banach spaces*, *Israel J. Math.* 139(2004), 253–291.
 54. *Ordinal indices in Banach spaces*, *Extracta Math.* 19(2004), 93–125.
 55. (with Hans-Olav Tylli) *Weakly compact approximation in Banach spaces*, *Trans. A.M.S.* 357(2005), 1125–1159.
 56. (with D. Alspach and R. Judd) *The Szlenk index and local ℓ_1 indices of a Banach space*, *Positivity* 9(2005), 1–44.
 57. (with G. Androulakis, Th. Schlumprecht and N. Tomczak-Jaegermann) *On the structure of the spreading models of a Banach space*, *Canadian Journal Math.*, 57(4) (2005), 673–707.
 58. (with W. B. Johnson) *The diameter of the isomorphism class of a Banach space*, *Annals Math.* 162(2005), 423–427.
 59. (with A. Martinez and M. Popov), *Some open problems on the classical function space L_1* , *Mat. Stud.* 24, N2.(2005), 173–191.
 60. (with Th. Schlumprecht) *Embedding into Banach spaces with finite dimensional decompositions*, *Rev. R. Acad. Cien. Serie A. Mat.* vol. 100(2) (2006), 295–323.
 61. (with B. Wahl and I. Gasparis) *Weakly null sequences in the Banach spaces $C(K)$* , *Methods in Banach Space Theory*, Jesús M.F. Castillo and William B. Johnson (eds.), *Lecture Note Series of LMS*, (No. 337) Cambridge University Press, (2006), 97–131.
 62. (with Th. Schlumprecht) *A reflexive Banach space, universal for the class of uniformly convex spaces*, *Math. Ann.* 335(2006), no.4, 901–916.
 63. (with M. Junge and D. Kutzarova) *On asymptotically symmetric Banach spaces*, *Studia Math.*

- 173(2006), no.3, 203–231.
64. (with S. Dilworth and B. Sari) *Lattice structures and spreading models*, Israel J. Math., 161 no.1 (2007), 387–411.
65. (with S. Dilworth, V. Ferenczi and D. Kutzarova) *On strongly asymptotic ℓ_p spaces and minimality*, J. London Math. Soc. (2) 75 (2007), 409–419.
66. (with Th. Schlumprecht and A. Zsák) *A new infinite game in Banach spaces with applications*, Banach spaces and their applications in analysis, editors B. Randrianantoanina and N. Randrianantoanina, de Gruyter (2007), 147–182.
67. (with Th. Schlumprecht and A. Zsák) *Banach spaces of bounded Szlenk index*, Studia. Math., 183(2007), 63–97.
68. (with P.G. Casazza, S.J. Dilworth, Th. Schlumprecht and A. Zsák) *Coefficient quantization for frames in Banach spaces*, Journal of Mathematical Analysis and Applications, 348 (2008), 66–86.
69. *The Banach space L_p* , *Advanced Courses of Mathematical Analysis III*, editors J. M. Delgado Sánchez and T. Domínguez Benavides, World Scientific (2008), 111–138.
70. (with Th. Schlumprecht and A. Zsák) *On the structure of asymptotic ℓ_p spaces*, Oxford Quarterly J. Math., 59(2008), no. 1, 85–122.
71. (with S. Dilworth, Th. Schlumprecht and A. Zsák) *Coefficient quantization in Banach spaces*, Foundations of Computational Mathematics, 8(2008), 703–736.
72. (with S. Dilworth, Th. Schlumprecht and A. Zsák) *Partial Unconditionality*, Houston J. Math., 35 (2009), 1251–1311.
73. (with D. Freeman, Th. Schlumprecht and A. Zsák) *Banach spaces of bounded Szlenk Index II*, Fundamenta Math., 205 (2009), no.2, 161–177.
74. (with B. Zheng) *On the unconditional subsequence property*, J. Funct. Anal. 258 (2010), no.2, 604–615.
75. (with R. Haydon and Th. Schlumprecht) *Small subspaces of L_p* , Annals of Math., 173 (2011), 169–209.
76. (with S. Dilworth, Th. Schlumprecht and A. Zsák) *Renormings and symmetry properties of one-greedy bases*, J. Approx. Theory, 163 (2011), 1049–1075.
77. (with B. Sari, Th. Schlumprecht and B. Zheng) *Systems formed by translations of one element in $L_p(\mathbb{R})$* , Trans. A.M.S. 363 (2011), 6505–6529.
78. (D. Freeman and Th. Schlumprecht) *The universality of ℓ_1 as a dual space*, Math. Ann. 351 (2011), no.1, 149–186.
79. (with S. Dilworth, D. Freeman and Th. Schlumprecht) *Greedy Bases for Besov Spaces*, Constructive Approx. 34 (2011), no.2, 281–296.
80. (with S.A. Argyros, D. Freeman, R.G. Haydon, Th. Raikoftsalis, Th. Schlumprecht and D.Z. Zismopoulou) *Embedding uniformly convex spaces into spaces with very few operators*, J. Funct. Anal. 262 (2012), 825–849.

Articles Accepted/In Press

81. (with S. Dilworth, Th. Schlumprecht and A. Zsák) *On the convergence of greedy algorithms for initial segments of the Haar basis*, Math. Proc. of Cambridge Phil. Soc., to appear.
82. (with N.J. Lausten, Th. Schlumprecht, and A. Zsák) *Dichotomy theorems for random matrices*

and ideals of operators on $(\oplus_{n=1}^{\infty} \ell_1^n)_{c_0}$, J. London Math. Soc., to appear.

Submitted/In Progress

83. (with S.A. Argyros, D. Freeman, R.G. Haydon, Th. Raikoftsalis, Th. Schlumprecht and D.Z. Zismopoulou) *HI Extensions of \mathcal{L}^∞ spaces and spaces with very few operators*.
84. (with P.N. Dowling, D. Freeman, C.J. Lennard, B. Randrianantoanina and B. Turett) *Weak Grothendieck compactness principles*.

Books

85. (edited with H. Rosenthal) **Functional Analysis: Proceedings, The University of Texas at Austin, 1986–87**, Springer-Verlag Lecture Notes in Mathematics, 1332(1988).
86. (edited with H. Rosenthal) **Functional Analysis: Proceedings, The University of Texas at Austin, 1987–89**, Springer-Verlag Lecture Notes in Mathematics, 1470(1991).
87. (with C. Henson, J. Iovino and A. Kechris) **Analysis and Logic**, London Math. Soc. LNS 262, Cambridge University Press (2002).
88. (with D. Marshall and M. Starbird) **Number theory through inquiry**, Mathematical Association of America, Textbooks (2007).