

Dr Richard Smith

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EDUCATION

PhD Mathematics, Christ Church, Oxford	2001 – 2005
Thesis: Trees, Talagrand Operators and Renorming Theory (supervisor: Prof. R. Haydon, Brasenose College, Oxford).	
MMath (First Class honours), Christ Church, Oxford	1995 – 1999
A-Levels (AAAAA), Dr Challoner's Grammar School, UK	1993 – 1995

ACADEMIC POSITIONS

Head of Mathematics, University College Dublin	2018 – 2021
Lecturer, University College Dublin	2009 – present
Visiting Asst. Professor, Mathematical Institute, AS CR, Prague	2008 – 2009
Fellow and Director of Studies, Queens' College, Cambridge	2005 – 2008
College Lecturer in Mathematics, Christ Church, Oxford	2003 – 2004
Tutor in Mathematics, St John's College, Oxford	2004
Tutor in Mathematics, Oxford Program for Undergraduate Studies	2003
Teaching Assistant, Mathematical Institute, Oxford	2001 – 2002

PUBLICATIONS

- R. J. Smith and F. Talimdjioski, *Lipschitz-free spaces over properly metrisable spaces and approximation properties*, preprint, 2023.
- R. J. Aliaga, E. Pernecká and R. J. Smith, *Convex integrals of molecules in Lipschitz-free spaces*, preprint, 2023.
- L. Ó Náraigh, K. E. Pang and R. J. Smith, *Convergence analysis of the Geometric Thin-Film equation*, preprint, 2023.
- L. Ó Náraigh, K. E. Pang and R. J. Smith, *A new convergence analysis of the particle method for the Camassa-Holm equation*, preprint, 2023.

PUBLICATIONS CONTINUED

- R. J. Smith and F. Talimdjioski, *Lipschitz-free spaces over manifolds and the metric approximation property*, J. Math. Anal. Appl. **(524)**, 2023.
- R. J. Smith, *A topological characterization of dual strict convexity in Asplund spaces*, J. Math. Anal. Appl. **(485)**, 2020.
- R. J. Smith, *Topology, isomorphic smoothness and polyhedrality in Banach spaces*, Topology Appl. **(266)**, 2019.
- T. A. Abrahamsen, V. P. Fonf, R. J. Smith and S. Troyanski, *Polyhedrality and decomposition*, Q. J. Math. **(70)** 409–427, 2019.
- R. J. Smith and S. Troyanski, *Approximation of norms in Banach spaces*, J. Funct. Anal. **(276)** 3226–3260, 2019.
- P. Bankston, A. McCluskey and R. J. Smith, *Semicontinuity of betweenness functions*, Topology Appl. **(246)** 22–47, 2018.
- V. Bible and R. J. Smith, *Smooth and polyhedral approximation in Banach spaces*, J. Math. Anal. Appl. **(435)** 1262–1272, 2016.
- T. Kania and R. J. Smith, *Chains of functions in $C(K)$ -spaces*, J. Aust. Math. Soc. **(99)** 350–363, 2015.
- V. P. Fonf, R. J. Smith and S. Troyanski, *Boundaries and polyhedral Banach spaces*, Proc. Amer. Math. Soc. **(143)** 4845–4849, 2015.
- E. Pernecká and R. J. Smith, *The metric approximation property and Lipschitz-free spaces over subsets of \mathbb{R}^N* , J. Approx. Theory **(199)** 29–44, 2015.
- V. P. Fonf, A. J. Pallares, R. J. Smith and S. Troyanski, *Polyhedrality in pieces*, J. Funct. Anal. **(266)** 247–264, 2014.
- P. Hájek and R. J. Smith, *Some duality relations in the theory of tensor products*, Expos. Math. **(30)** 239–249, 2012.
- V. P. Fonf, R. J. Smith and S. Troyanski, *A note on fragmentability and weak- G_δ sets*, Q. J. Math. **(63)** 375–380, 2012.
- R. J. Smith, *Strictly convex norms, G_δ -diagonals and non-Gruenhage spaces*, Proc. Amer. Math. Soc. **(140)** 3117–3125, 2012.
- J. Orihuela, R. J. Smith and S. Troyanski, *Strictly convex norms and topology*, Proc. London Math. Soc. **(104)** 197–222, 2012.
- R. J. Smith and S. Troyanski, *Renormings of $C(K)$ spaces*, Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. **(104)** 375–412, 2010.

PUBLICATIONS CONTINUED

P. Hájek and R. J. Smith, *Operator machines on directed graphs*, Integral Equations Operator Theory **(67)** 15–31, 2010.

R. J. Smith and S. Troyanski, *Unconditional bases and strictly convex dual renormings*, Bull. London Math. Soc. **(41)** 831–840, 2009.

R. J. Smith, *Gruenhage compacta and strictly convex dual norms*, J. Math. Anal. Appl. **(350)** 745–757, 2009.

V. P. Fonf, A. J. Pallares, R. J. Smith and S. Troyanski, *Polyhedral norms on non-separable Banach spaces*, J. Funct. Anal. **(255)** 449–470, 2008.

R. J. Smith, *Trees, linear orders and Gâteaux smooth norms*, J. London Math. Soc. **(76)** 633–646, 2007.

R. J. Smith, *Trees, Gâteaux smooth norms and a problem of Haydon*, Bull. London Math. Soc. **(39)** 112–120, 2007.

R. J. Smith, *On trees and dual rotund norms*, J. Funct. Anal. **(231)** 177–194, 2006.

R. J. Smith, *The Tale of a PhD Mathematician*, Mathematics Today **(41)** 76–77, June 2005.

R. J. Smith, *Bounded linear Talagrand operators on ordinal spaces*, Q. J. Math. **(56)** 383–395, 2005.

ACADEMIC VISITS AND EXTERNAL COLLABORATIONS

University of Murcia, Spain	2006 – 2022
Czech Technical University in Prague, Czech Republic	Dec 2017, Dec 2019
Institute of Mathematics, Polish Academy of Sciences, Warsaw	Feb 2016
Mathematical Institute, Bulgarian Academy of Sciences, Sofia	Jan 2010, Sep 2019
Mathematical Institute, Czech Academy of Sciences, Prague	Sep 2011
University of Bordeaux, France	Sep 2007
University of Valencia, Spain	Apr 2006

CONFERENCES, WORKSHOPS AND SEMINARS

Gave talks in seminars in Besançon, Bordeaux, Cambridge, CAS and CVUT Prague, DCU, IMPAN Warsaw, Lancaster, Leeds, Murcia, Oxford, Paris, Plovdiv, Sofia, TCD, UCD, UCL and Valencia. Presented papers at all but five of the following conferences and workshops.

First conference on Lipschitz free spaces, Besançon, France (invited speaker)	2023
Linear and non-linear analysis in Banach spaces, Santander, Spain (invited speaker)	2023
Functional Analysis in Lille, France	2022
Banach spaces and optimization, Métabief, France	2019
Non Linear Functional Analysis, CIRM, Luminy, France (invited speaker)	2018
Geometric Topology and Geometry of Banach Spaces, Eilat, Israel (invited speaker)	2017
Transfinite methods in Banach spaces, Beđlewo, Poland (invited speaker)	2016
30th Summer Conference on Topology and Applications, Galway (invited speaker)	2015
Spring School, Mathematics and Statistics, Otepää, Estonia (invited speaker)	2015
Infinite Dimensional Function Theory, UCD, Dublin (invited speaker)	2015
First Brazilian Workshop in Geometry of Banach Spaces, Maresias (invited speaker)	2014
Geometry of Banach Spaces, Albacete, Spain (invited speaker)	2014
15th Educational Technology Conference of the ILTA, Dublin	2014
Kangro 100 – Methods of Analysis and Algebra, Tartu, Estonia	2013
QOP Meeting, Lancaster, UK (invited speaker)	2013
Workshop on set theoretic methods, Warsaw (invited speaker)	2013
41st Winter School in Analysis, Káčov, Czech Republic (invited speaker)	2013
Geometry of Banach Spaces, CIRM, Luminy, France (invited speaker)	2012
Banach Spaces Workshop, Birmingham, UK	2012
General Topology and its Applications, New York	2011
Functional Analysis Meeting, Valencia, Spain (invited speaker)	2010
Function Theory on Infinite Dimensional Spaces XI, Madrid	2009
Modern Functional Analysis, Aranjuez, Spain	2009
CMS Winter Meeting 2008, Ottawa (invited speaker)	2008
Spring Conference on Banach spaces, Paseky, Czech Republic	2008
Workshop in Banach space theory, Murcia, Spain (invited speaker)	2007
Spring Conference on Banach Spaces, Paseky, Czech Republic	2007
Banach space theory: classical topics and new directions, Cáceres, Spain	2006
III Workshop in Functional Analysis, Murcia, Spain	2006
Function Theory on Infinite Dimensional Spaces IX, Madrid	2005

CONFERENCES, WORKSHOPS AND SEMINARS CONTINUED

V Conference on Banach Spaces, Cáceres, Spain 2004

Non-Separable Banach Spaces, Paseky, Czech Republic 2004

AWARDS AND SCHOLARSHIPS

Research Frontiers Programme, Science Foundation Ireland 2011 – 2015

Doctoral Training Grant, EPSRC, UK 2001 – 2004

Wilson Scholarship, Christ Church, Oxford 1999

Open Scholarship, Christ Church, Oxford 1996 – 1999

GRADUATE SUPERVISION AND EXAMINATION RECORD

PhD and MSc supervisor

Supervised 1 PhD student to completion (2011-2015); currently supervising 2nd PhD student in their final year (2019-2023). Supervised 2 MSc students (2017, 2023).

External and internal examiner

External examiner for 2 PhD theses (Charles University, Prague, 2012 and Lancaster University, UK 2023); internal examiner for 1 PhD thesis (2011) and 1 MSc thesis (2015).

ACADEMIC SERVICE

Academic Referee 2005 – present

Refereed manuscripts for the Transactions and Proceedings of the American Mathematical Society (AMS), the Bulletin of the Australian Mathematical Society, Commentationes Mathematicae, the Edinburgh Mathematical Society, Fundamenta Mathematicae, the International Mathematical Research Notices, the Houston Journal of Mathematics, the Journal of Approximation Theory, the Journal of Geometric Analysis, the Journal of Mathematical Analysis and its Applications, the London Mathematical Society, the Mediterranean Journal of Mathematics, the Quarterly Journal of Mathematics (Oxford), the Spanish Royal Academy of Sciences, Studia Mathematica and Topology and its Applications.

Reviewer for AMS Mathematical Reviews 2009 – present

PROFESSIONAL EMPLOYMENT

Webmaster, Prime Marketing Publications Ltd., Chorleywood, UK 2000 – 2001

Developed a suite of online reports to enhance the company's services to IT consultants and decision makers. Designed, coded and implemented all core elements of the websites, using ASP, SQL Server and HTML. Trained content writers to update and maintain the sites.

PROFESSIONAL EMPLOYMENT CONTINUED

Intern, NAFSA, Washington DC

1999

Participated in the design, installation and testing of a sub-network, for use in an in-house training program. Y2K testing.

PERSONAL DETAILS

Date of birth 24th July 1977.

Nationality British.

Interests History, art, music and working and travelling abroad.