

CURRICULUM VITAE OF ALISTAIR WINDSOR
Associate Professor
Department of Mathematical Sciences
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Professional Preparation

2002 PhD Mathematics, The Pennsylvania State University
1996 BCA Mathematical Economics, Victoria University of Wellington, New Zealand
1995 BSc Mathematics, Victoria University of Wellington, New Zealand

Appointments

2013– Associate Professor, University of Memphis, TN
2012– Co-Director, Tigers Teach, University of Memphis, TN
2007–2013 Assistant Professor, University of Memphis, TN
2004–2007 Instructor, University of Texas at Austin, TX
2002–2004 EPSRC Research Associate, The Victoria University of Manchester, UK

Grant Roles

Co-PI, Shelby County Schools Mathematics Science Partnership, 2013-2014.
Co-PI, 5th Grade Professional Development, Tipton County Schools, 2013-2014.
PI, Supporting a New Generation, S-STEM Grant, *National Science Foundation*, 2012-2016.
Co-PI, mMIND: Mobiles, Mathematics, Inquiry, and Data, STEM Professional Development Grant, *Tennessee Higher Education Commission*, 2012–2013.
PI, Securing the Foundation of the Algebra Pyramid (Professional Development for 5th Grade Mathematics Teachers), Improving Teacher Quality (ITQ) Grant, *Tennessee Higher Education Commission*, 2012.
PI, Inquiry-Based Learning for In-Service High School Teachers. *Educational Advancement Foundation*, 2008-2011 (extended).
Senior Personnel, Adaptive, Generalizable, Intelligent Tutors for Naval Training and Education, *Office of Naval Research*, 2012-2013.
Senior Personnel, MemphiSTEP: A STEM Talent Expansion Program. *National Science Foundation*, 2008-2014. (Added as Co-PI, 2013)
Senior Personnel, Math Science Partnership Grant: Teacher Excellence: Ensuring Student Competitiveness. *Department of Education, State of Tennessee*, 2008-2009.

Journal Publications

- Windsor, A. – Lead, Bargagliotti, A. M., Best, R., Franceschetti, D., Haddock, J., Ivey, S. and Russomanno, D. Increasing Retention in STEM: Results from a STEM Talent Expansion Program at the University of Memphis. *Under Review*.
- McCutcheon, R., Windsor, A. A Characteristic Factor for the 3-Term IP Roth Theorem In $\mathbb{Z}_3^{\mathbb{N}}$
Under Review.
- McCutcheon, R., Windsor, A. D-Sets and a Sarkozy Theorem for Finite Fields.
Accepted to the Israel Journal of Mathematics.
- Bargagliotti, A.E., Botelho, F., Gleason, J., Haddock, J., Windsor, A. (2012). The Effectiveness of Blended Instruction in Postsecondary General Education Mathematics Courses. *International Journal for Technology in Mathematics Education*. 19(3), 83–94
- Bargagliotti, A.E., Botelho, F., Gleason, J., Haddock, J., Windsor, A. A Report on the Effectiveness of Blended Instruction in General Education Mathematics Courses. *Proceedings Of The 14th Annual Conference On Research In Undergraduate Mathematics Education*. 25-38
- de la Llave, R., & Windsor, A. (2011). Smooth dependence on parameters of solutions to cohomology equations over Anosov systems with applications to cohomology equations on diffeomorphism groups. *Discrete and Continuous Dynamical Systems, Series A*, 29(3), 1141 – 1154
- de la Llave, R., & Windsor, A. (2011). Avoiding Early Closing: A Corrigendum to “Livsic theory for diffeomorphism groups with applications to conformal structures.” *Ergodic Theory and Dynamical Systems*, 31(4), 1269-1272
- Windsor A. (2010). A contraction mapping proof of the smooth dependence on parameters of solutions to Volterra integral equations. *Nonlinear Analysis. Theory, Methods & Applications. Series A: Theory and Methods*, 72(9-10), 3627-3634
- de la Llave, R., & Windsor, A. (2009). Livsic theorems for non-commutative groups including diffeomorphism groups and results on the existence of conformal structures for Anosov systems. *Ergodic Theory and Dynamical Systems*. 30(4), 1055 - 1100
- de la Llave, R., & Windsor, A. (2009). Multiple recurrence and tiling theory. *Discrete and Continuous Time Dynamical Systems, Series S*, 2(2), 315–324.
- Windsor, A. (2008). Smoothness is not an obstruction to realizability. *Ergodic Theory and Dynamical Systems*, 28(3), 1037–1041.
- Fayad, B., & Windsor, A. (2007). A dichotomy between discrete and continuous spectrum for a class of special flows over rotations. *Journal of Modern Dynamics*, 1(1), 107–122.
- Fayad, B., Saprykina, M., & Windsor, A. (2007). Non-standard smooth realizations of Liouville rotations. *Ergodic Theory and Dynamical Systems*, 27(6), 1803–1818.
- Melbourne, I., & Windsor, A. (2005). A C^∞ diffeomorphism with infinitely many intermingled basins. *Ergodic Theory and Dynamical Systems*, 25(6), 1951–1959.

Fayad, B., Katok, A. B., & Windsor, A. (2001). Mixed spectrum reparametrizations of linear flows on T^2 . *Moscow Mathematics Journal*, 1(4), 521–537.

Windsor, A. (2001). Minimal but not uniquely ergodic diffeomorphisms. In *Proceedings of Symposia in Pure Mathematics*, Volume 69 (pp. 809–824). Providence, RI: American Mathematical Society.

External Roles (National)

Partnership for Assessment of Readiness for College and Careers (PARCC) Core Leadership Review Team, 2012–

External Roles (State)

Institutes of Higher Education Common Core Advisory Board, State of Tennessee, 2012–

Southwestern Core to College Curriculum Council, 2013–

External Roles (Local)

Technical Assistance Visits – High Schools That Work – Wooddale High School and Booker T. Washington High School, 2011

Mathematics Advisor to the Optional Program at Grahamwood Elementary Schools, 2011–

Theses Supervised

2010 Scotty Houston, MS, A Comparison of Some Numerical Methods for Solving Volterra Integral Equations

2008 Daniel Boboc, MS, Applications of Fourier Analysis in Image Processing

2003 Mathew Blakeman, MSc, Arithmetic and Growth of Periodic Orbits for Dynamical Systems

Served on 2 MS committees and 2 PhD committees

Technical Skills

Highly proficient in Mathematica and Stata.

Other Synergistic Activities

Marcus Orr Center for Humanities Informance, Tom Stoppard’s Arcadia, 2011

M2 Enrichment Cohort Program for 8th grade Statistics, Ridgeway Middle School, April 2011.

Mathematics at Memphis, Presentation for High School Students, March 2009

Address $\mu\alpha\theta$ (MATH) Induction, White Station High School, Memphis, TN, November 2007

Saturday Morning Math Group, Presentation for High School Students, February 2006

Invited Seminar and Conference Talks

Fall Southeastern Sectional Meeting,
University of Louisville, Louisville, KY, October 5-6, 2013

Topology and Geometry Seminar
Florida State University, October 2011

Erdős Conference
University of Memphis, September 2011

Legacy of R. L. Moore Conference
Austin, Texas, 17-19 June, 2010

International Conference on Interdisciplinary Mathematical & Statistical Techniques
University of Memphis, 15-18 May, 2008

1st Joint International Meeting between the American Mathematical Society and the New
Zealand Mathematical Society
Victoria University of Wellington December 12-15, 2007

Analysis Seminar
Texas A&M University, November 1, 2007

AMS Central Sectional Meeting
DePaul University, Chicago, October 2007

Math Department Colloquium
Trinity University, San Antonio, TX, November 7, 2006

Semi Annual Workshop in Dynamical Systems
Penn State University, November 2–5, 2006

Analysis Seminar
University of Houston, TX, September 29, 2006

SIAM Conference on Applications of Dynamical Systems
Hyperbolic Dynamical Systems Mini-Symposium
Snowbird, UT, May 22–26, 2005

Dynamical Systems Seminar
University of Surrey, U.K., October 24, 2003

Dynamical Systems Seminar
Queen Mary, University of London, October 14, 2003

Equa-Diff Session on Ergodicity in Dynamical Systems
Hasselt, Belgium, July 22–26, 2003

Dynamical Systems Seminar
University of Warwick, U.K., May 27, 2003

Dynamical Systems Seminar
Jussieu, Paris, March 28, 2003

Dynamical Systems Seminar
Villetaneuse, France, March 24, 2003

Pure Mathematics Colloquium
University of Liverpool, U.K., March 21, 2003

One Day Ergodic Theory Meeting
Victoria University of Manchester, U.K., November 13, 2002

Semi-Annual Workshop in Dynamics and Related Topics
Pennsylvania State University, October 11–14, 2001

School of Mathematics, Computer Science, and Statistics Seminar
Victoria University of Wellington, New Zealand, July 31, 2001

EuroConference on Ergodic Theory, Geometric Rigidity and Number Theory
Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K., July 3–7, 2000

AMS Summer Research Institute: Smooth Ergodic Theory and Applications
University of Washington, July 26–August 13, 1999